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NEWS	5	AUG 24	CA/CAPLUS enhanced with legal status information for U.S. patents
NEWS	6	SEP 09	50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY
NEWS	7	SEP 11	WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus
NEWS	8	OCT 21	Derwent World Patents Index Coverage of Indian and Taiwanese Content Expanded
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NEWS	13	DEC 01	DGENE, USGENE, and PCTGEN: new percent identity feature for sorting BLAST answer sets
NEWS	14	DEC 02	Derwent World Patent Index: Japanese FI-TERM thesaurus added
NEWS	15	DEC 02	PCTGEN enhanced with patent family and legal status display data from INPADOCDB
NEWS	16	DEC 02	USGENE: Enhanced coverage of bibliographic and sequence information
NEWS	17	DEC 21	New Indicator Identifies Multiple Basic Patent Records Containing Equivalent Chemical Indexing in CA/CAPLUS

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=> s anti apopto?  
L1            29954 ANTI APOPTO?

=> s apoptosis (3a) inhibitor  
L2            20334 APOPTOSIS (3A) INHIBITOR

=>

=> s apoptosis (3a) inhibit?  
L3            74553 APOPTOSIS (3A) INHIBIT?

=> s apopto? (3a) protect?  
L4            16445 APOPTO? (3A) PROTECT?

=> s l1 or l2 or l3  
L5            97885 L1 OR L2 OR L3

=> s l5 and transactivat?

L6 1249 L5 AND TRANSACTIVAT?

=> s 16 and CHO

L7 7 L6 AND CHO

=> dup rem 17

PROCESSING COMPLETED FOR L7

L8 5 DUP REM L7 (2 DUPLICATES REMOVED)

=> d bib abs 1-

YOU HAVE REQUESTED DATA FROM 5 ANSWERS - CONTINUE? Y/(N):y

L8 ANSWER 1 OF 5 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

AN 2006:680140 BIOSIS

DN PREV200600674562

TI Mdm2-mediated NEDD8 modification of TAp73 regulates its transactivation function.

AU Watson, Ian R.; Blanch, Alvaro; Lin, Dan C. C.; Ohh, Michael; Irwin,

Meredith S. [Reprint Author]

CS Hosp Sick Children, Canc Res Program, 555 Univ Ave, Toronto, ON M5G 1X8,

Canada

meredith.irwin@sickkids.ca

SO Journal of Biological Chemistry, (NOV 10 2006) Vol. 281, No. 45, pp.

34096-34103.

CODEN: JBCHA3. ISSN: 0021-9258.

DT Article

LA English

ED Entered STN: 6 Dec 2006

Last Updated on STN: 6 Dec 2006

AB Mutations in p73 are rare in cancer. Emerging evidence suggests that the

relative expression of various p73 isoforms may contribute to tumorigenesis. Alternative promoters and N-terminal splicing

result in

the transcription and processing of either full-length (TA) or N-terminally truncated (Delta N) p73 isoforms. TAp73 possesses pro-apoptotic functions, while Delta Np73 has anti-apoptotic properties via functional inhibition of TAp73 and p53.

Here, we report that TAp73, but not Delta Np73, is covalently modified by

NEDD8 under physiologic conditions in an Mdm2-dependent manner.

Co-expression of NEDP1, a cysteine protease that specifically cleaves

NEDD8 conjugates, was shown to deneddylate TAp73. In addition, blockage

of the endogenous NEDD8 pathway increased TAp73-mediated transactivation of p53- and p73-responsive promoter-driven reporter activity, and in conjunction, neddylated TAp73 species

were found

preferentially in the cytoplasm. These results suggest that Mdm2 attenuates TAp73 transactivation function, at least in part, by promoting NEDD8-dependent TAp73 cytoplasmic localization and provide the first evidence of a covalent post-translational modification exclusively targeting the TA isoforms of p73.

L8 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:638656 CAPLUS  
 DN 143:127857  
 TI Enhancement of transactivation system for recombinant protein expression in mammalian cells by reducing apoptosis  
 IN Bebbington, Christopher Robert; Yu, Bo  
 PA Kalobios, Inc., USA  
 SO PCT Int. Appl., 119 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.
WO 2005065348	A2	20050721	WO 2004-US43830
20041230			
WO 2005065348	A3	20051027	
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, MR, NE, SN, TD, TG		
EP 1702071	A2	20060920	EP 2004-815827
20041230			
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,		

IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS  
US 20090111144 A1 20090430 US 2006-585149  
20060630  
PRAI US 2003-533917P P 20031231  
WO 2004-US43830 W 20041230  
AB The present invention relates to recombinant protein expression  
in a  
mammalian host cell using a co-expressed transcriptional  
activator (transactivator). More specifically, the invention relates to the  
enhancement of recombinant protein production by reducing  
apoptosis in a  
population of cells that contain a recombinant transactivator  
introduced into the cell to enhance gene expression of the  
recombinant  
protein. In particular, the invention provides vectors, host  
cells, and  
methods of expressing at least one desired polypeptide by  
transfecting a  
mammalian host cell with cistrons encoding a transactivator, a  
desired polypeptide, and an apoptosis-protective protein. In one  
embodiment the apoptosis-protective protein is Bcl-2, or Bcl-2  
having a  
deletion in the regulatory loop domain. In a preferred  
embodiment the  
transactivator is an adenoviral Ela protein or a variant thereof,  
more preferably an Ela protein from human Ad2, Ad5 or Ad12. In  
another  
preferred embodiment, the transactivator is CREB  
(cAMP-responsive element-binding) or its variant.  
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT  
  
L8 ANSWER 3 OF 5 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All  
rights  
reserved on STN  
AN 2005118695 EMBASE  
TI Immunomodulating and anti-apoptotic action of  
ursodeoxycholic acid: Where are we and where should we go?.  
AU Bellentani, Stefano, Dr. (correspondence)  
CS Centro Studi Fegato, AREA Science Park, Basovizza, Trieste,  
Italy.  
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CS Fondo Studi Fegato, Sezione di Modena, Via G. Bove, 13, 41100  
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Italy. liversb@unimore.it  
SO European Journal of Gastroenterology and Hepatology, (Feb 2005)  
Vol. 17,

No. 2, pp. 137-140.

Refs: 30

ISSN: 0954-691X CODEN: EJGHES

CY United Kingdom

DT Journal; General Review; (Review)

FS 030 Clinical and Experimental Pharmacology

037 Drug Literature Index

048 Gastroenterology

LA English

SL English

ED Entered STN: 31 Mar 2005

Last Updated on STN: 31 Mar 2005

AB Ursodeoxycholic acid (UDCA) is currently used in clinical practice

worldwide not only for the dissolution of cholesterol gallstones, but

also, mainly, to treat patients with chronic cholestatic liver diseases.

However, the mechanisms of action of UDCA at the hepatocyte and cholangiocyte levels are still not completely understood. Much progress

has been made from the first concept that the only mechanism of action of

this bile acid was its choleretic action. One of the most fascinating

mechanisms of action that was evoked for UDCA is its immunomodulating and

anti-apoptotic action, which could, in part, be

explained by its interaction with the glucocorticoid nuclear receptor at

the hepatocyte level. Glucocorticoids, whose prototype is dexamethasone,

are the major ligands of the glucocorticoid receptor. The biological

effects of glucocorticoids are driven by a multiple-step reaction including binding of the steroid to the glucocorticoid receptor,

DNA

binding, receptor transformation, nuclear translocation and either

positive or negative gene transactivation. In this issue of the journal, Weitzel and co-workers clearly demonstrated that the binding of

UDCA to the glucocorticoid receptor is unspecific. Therefore, the

anti-inflammatory, cytoprotective and anti-apoptotic actions of UDCA should be due not only to the mild interaction with the

glucocorticoid receptor, but also to transactivation or transrepression of different cytoplasmic proteins that are involved in the

survival pathway. .COPYRGT. 2005 Lippincott Williams & Wilkins.

L8 ANSWER 4 OF 5 BIOSIS COPYRIGHT (c) 2009 The Thomson  
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DUPLICATE 1

AN 2004:351886 BIOSIS

DN PREV200400352528

TI TATA-binding protein-associated factor 7 regulates polyamine  
transport

activity and polyamine analog-induced apoptosis.

AU Fukuchi, Junichi; Hiipakka, Richard A.; Kokontis, John M.;  
Nishimura,

Kazuhiro; Igarashi, Kazuei; Liao, Shutsung [Reprint Author]

CS Ben May Inst Canc Res, Univ Chicago, MC6027, 5841 S Maryland Ave,  
Chicago,

IL, 60637, USA

sliao@huggins.bsd.uchicago.edu

SO Journal of Biological Chemistry, (July 16 2004) Vol. 279, No.  
29, pp.

29921-29929. print.

CODEN: JBCHA3. ISSN: 0021-9258.

DT Article

LA English

ED Entered STN: 26 Aug 2004

Last Updated on STN: 26 Aug 2004

AB Identification of the polyamine transporter gene will be useful  
for

modulating polyamine accumulation in cells and should be a good  
target for

controlling cell proliferation. Polyamine transport activity in  
mammalian

cells is critical for accumulation of the polyamine analog  
methylglyoxal

bis(guanylhyazone) (MGBG) that induces apoptosis, although a  
gene

responsible for transport activity has not been identified.

Using a

retroviral gene trap screen, we generated MGBG-resistant Chinese  
hamster

ovary (CHO) cells to identify genes involved in polyamine

transport activity. One gene identified by the method encodes

TATA-binding protein-associated factor 7 (TAF7), which functions  
not only

as one of the TAFs, but also a coactivator for c-Jun.

TAF7-deficient

cells had decreased capacity for polyamine uptake (20% of CHO

cells), decreased AP-1 activation, as well as resistance to

MGBG-induced

apoptosis. Stable expression of TAF7 in TAF7-deficient cells

restored

transport activity (55% of CHO cells), AP-1 gene

transactivation (100% of CHO cells), and sensitivity to

MGBG-induced apoptosis. Overexpression of TAF7 in CHO cells did

not increase transport activity, suggesting that TAF7 may be

involved in

the maintenance of basal activity. c-Jun NH2-terminal kinase inhibitors blocked MGBG-induced apoptosis without alteration of polyamine transport. Decreased TAF7 expression, by RNA interference, in androgen-independent human prostate cancer LN-CaP104-R1 cells resulted in lower polyamine transport activity (25% of control) and resistance to MGBG-induced growth arrest. Taken together, these results reveal a physiological function of TAF7 as a basal regulator for mammalian polyamine transport activity and MGBG-induced apoptosis.

L8 ANSWER 5 OF 5 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

AN 2004:123339 BIOSIS

DN PREV200400116629

TI Pro-apoptotic role of casein Kinase 2 is mediated by a JNK signaling cascade.

AU Hilgard, Philip [Reprint Author]; Gerken, Guido [Reprint Author]; Czaja, Mark J.; Stockert, Richard J.

CS University Hospital Essen, Essen, Germany

SO Hepatology, (October 2003) Vol. 38, No. 4 Suppl. 1, pp. 241A. print.

Meeting Info.: 54th Annual Meeting of the American Association for the Study of Liver Diseases. Boston, MA, USA. October 24-28, 2003. American

Association for the Study of Liver Diseases.  
ISSN: 0270-9139 (ISSN print).

DT Conference; (Meeting)  
Conference; (Meeting Poster)  
Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 3 Mar 2004

Last Updated on STN: 3 Mar 2004

AB The tetrameric enzyme Protein Kinase CK2 plays a significant role in the

regulation of cell proliferation, malignant transformation and apoptosis.

The catalytic alpha-subunit of the enzyme is known to exist in three

isoforms, CK2alpha, CK2alpha' and the recently described CK2alpha",

predominately located in the nuclear matrix of hepatocytes.

Preliminary

studies suggested that CK2alpha" plays a pivotal role in the induction of

cell death. The AIM of the present study was to determine the mechanism



whereby CK2alpha" regulates hepatocellular apoptosis. METHODS and

RESULTS: When compared to wildtype (wt) HuH-7 cells, the CK2alpha" (-/-)

Trf1 mutant cell line was resistant to apoptosis induced by a variety of

cell death stimuli as determined by the MTT assay. By 90 h post-infection

with dengue virus (DEN), 85-90% of the wt-HuH-7 cells had undergone cell

death, in comparison to only 6% of Trf1 cells. After TNF treatment, 80%

of wt-HuH-7 cells died within 48 h, but death in Trf1 cells was less than

10%. For other death stimuli, the reduction in cell death between

wt-HuH-7 and Trf1 ranged from 75% for menadione, 62% for okadaic acid, 55%

for H2O2, 50% for UV-light, to 43% for acetaminophen. The resistant

phenotype was reverted by stable transfection of Trf1 cells with recombinant CK2alpha", which re-sensitized Trf1 cells to death induced by

DEN, TNF and UV. Flowcytometric measurement of DNA hypoploidy revealed

that DEN and TNF induced DNA fragmentation indicating that apoptosis was

the predominant cause of cell death. Immunoblot analysis revealed that

DEN infection did not induce caspase-3 or -8 activation in either cell

line. In contrast, TNF treatment induced caspase activation in wt-HuH-7

with no effect in Trf1 cells. This differential response was confirmed by

the selective inhibition of TNF induced apoptosis in

wt-HuH-7 by the pan-caspase inhibitor Z-VAD-FMK and the caspase-3 inhibitor DEVD-CHO, while DEN induced cell death was unaffected.

Mitochondrial permeability as indicated by the release of cytochrome c

occurs upstream of caspase activation in different death pathways.

Immunoblot analysis showed that DEN infection resulted in equal increases

in cytoplasmic cytochrome c levels in both wt-HuH-7 and Trf1, as opposed

to TNF, which had no effect. As CK2 has several potential links to

NF-kappaB, induction of this pathway by DEN infection and TNF treatment

was assessed either by the phosphorylation of IkappaB or by a luciferase

assay of NF-kappaB transactivation. TNF induced equal  
 activation of NF-kappaB in both cell lines. DEN infection did  
 not result  
 in NF-kappaB activation in either cell line. Evaluation of JNK  
 related  
 pathways involved in death signaling revealed a dramatic  
 deficiency of  
 c-Jun phosphorylation after stimulation with DEN or TNF in Trf1  
 cells  
 without affecting the absolute concentration of either JNK or  
 c-Jun. To  
 test the significance of c-Jun in HuH-7 death signaling, cells  
 were  
 pre-infected with a dominant negative c-Jun expressing  
 adenovirus. TNF  
 induced cell death was reduced from 75% to 20% in infected  
 wt-HuH-7 cells.  
 The difference in JNK activity translated into a differential  
 AP-1  
 activation in the two cell lines. The initial AP-1 activity in  
 untreated  
 Trf1 cells was only 25% of that found in wt-HuH-7 cells. TNF  
 treatment  
 resulted in a 1.5 fold increase of AP-1 dependent reporter  
 transcription  
 in both cell lines thereby retaining the initial differential.  
 DEN  
 infection increased AP-1 activity in wt-HuH-7, while activity  
 remained  
 unchanged or slightly decreased in Trf1 cells. Consistent with a  
 pro-apoptotic role for JNK, pretreatment with the JNK inhibitor  
 SP600125  
 reduced TNF and DEN induced cell death in wt-HuH-7 by more than  
 three  
 fold. CONCLUSION: These results suggest a role for the  
 JNK/c-Jun/AP-1  
 signal cascade in the regulation of a critical CK2alpha"  
 dependent  
 pro-apoptotic step in HuH-7 cells.

=> s ucoe

L9 36 UCOE

=> s ubiquitous chromatin opening element

L10 12 UBIQUITOUS CHROMATIN OPENING ELEMENT

=> s l9 or l10

L11 37 L9 OR L10

=> s l11 and hnRNP A2

L12 2 L11 AND HNRNP A2

=> d bib abs 1-

YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y

L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:638656 CAPLUS

DN 143:127857

TI Enhancement of transactivation system for recombinant protein  
expression

in mammalian cells by reducing apoptosis

IN Bebbington, Christopher Robert; Yu, Bo

PA Kalobios, Inc., USA

SO PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.
DATE			
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PI WO 2005065348	A2	20050721	WO 2004-US43830
20041230			
WO 2005065348	A3	20051027	
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,			
CA, CH,			
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,			
GB, GD,			
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,			
KZ, LC,			
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,			
NA, NI,			
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,			
SL, SY,			
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,			
ZM, ZW			
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,			
ZW, AM,			
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,			
DE, DK,			
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL,			
PL, PT,			
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,			
GW, ML,			
MR, NE, SN, TD, TG			
EP 1702071	A2	20060920	EP 2004-815827
20041230			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,			
MC, PT,			
IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS			
US 20090111144	A1	20090430	US 2006-585149
20060630			

PRAI US 2003-533917P P 20031231  
WO 2004-US43830 W 20041230

AB The present invention relates to recombinant protein expression in a

mammalian host cell using a co-expressed transcriptional activator

(transactivator). More specifically, the invention relates to the

enhancement of recombinant protein production by reducing apoptosis in a

population of cells that contain a recombinant transactivator introduced

into the cell to enhance gene expression of the recombinant protein. In

particular, the invention provides vectors, host cells, and methods of

expressing at least one desired polypeptide by transfecting a mammalian

host cell with cistrons encoding a transactivator, a desired polypeptide,

and an apoptosis-protective protein. In one embodiment the apoptosis-protective protein is Bcl-2, or Bcl-2 having a deletion in the

regulatory loop domain. In a preferred embodiment the transactivator is

an adenoviral Ela protein or a variant thereof, more preferably an Ela

protein from human Ad2, Ad5 or Ad12. In another preferred embodiment, the

transactivator is CREB (cAMP-responsive element-binding) or its variant.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2000:85020 CAPLUS

DN 132:133229

TI A polynucleotide comprising a ubiquitous chromatin opening element (UCOE)

IN Antoniou, Michael; Crombie, Robert

PA Cobra Therapeutics Limited, UK

SO PCT Int. Appl., 188 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.
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DATE	-----	----	-----	-----
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PI	WO 2000005393	A2	20000203	WO 1999-GB2357
	19990721			

WO 2000005393	A3	20000817	
CU, CZ,	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN,		
IN, IS,	DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,		
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CA 2333852	A1	20000203	CA 1999-2333852
19990721			
CA 2333852	C	20070529	
AU 9950534	A	20000214	AU 1999-50534
19990721			
AU 771111	B2	20040311	
EP 1098986	A2	20010516	EP 1999-934910
19990721			
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JP 2002522027	T	20020723	JP 2000-561339
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JP 4220673	B2	20090204	
US 20020106789	A1	20020808	US 1999-358082
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US 6689606	B2	20040210	
CN 100365127	C	20080130	CN 1999-811155
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CN 101260384	A	20080910	CN 2007-10193347
19990721			
KR 795626	B1	20080117	KR 2001-700883
20010119			
MX 2001000830	A	20020604	MX 2001-830
20010122			
US 20030018986	A1	20030123	US 2002-224972
20020821			
US 20030061627	A1	20030327	US 2002-224993
20020821			
US 20030061628	A1	20030327	US 2002-225418
20020821			
US 6964951	B2	20051115	
US 20030082599	A1	20030501	US 2002-225073
20020821			
US 6881556	B2	20050419	
JP 2005052149	A	20050303	JP 2004-293969
20041006			

US 20050181428	A1	20050818	US 2005-87052
20050322			
US 7442787	B2	20081028	
KR 2007108336	A	20071109	KR 2007-103583
20071015			
JP 2008109931	A	20080515	JP 2007-285560
20071101			
JP 2009102331	A	20090514	JP 2008-305611
20081128			
KR 2009117675	A	20091112	KR 2009-93097
20090930			
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US 1998-107688P	P	19981109	
GB 1999-6712	A	19990323	
US 1999-127410P	P	19990401	
GB 1999-9494	A	19990423	
US 1999-134016P	P	19990512	
CN 1999-811155	A3	19990721	
JP 2000-561339	A3	19990721	
US 1999-358082	A3	19990721	
WO 1999-GB2357	W	19990721	
KR 2001-700883	A3	20010119	
US 2002-225418	A1	20020821	
JP 2004-293969	A3	20041006	
KR 2007-103583	A3	20071015	
JP 2007-285560	A3	20071101	

# ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention relates to a polynucleotide comprising a ubiquitous chromatin opening element (UCOE) which is not derived from an LCR (locus control region). UCOE element are provided from genomic clones of the human TATA-binding protein (TBP) gene locus and the human heterogeneous nuclear ribonucleoprotein (hnRNP) A2 gene locus. Sequence anal. reveals that the TBP promoter regions are contained with a methylation-free, CpG-island. The TBP and hn RNP-A2 gene loci share the common feature of closely linked, divergently transcribed promoters. The UCOE substantially improves gene expression in the context of adenovirus, a non-integrating vector of great potential in gene therapy, and also elevates expression from weak but specific promoters to much more useful levels with retention of useful specificity. The present invention also relates to a vector comprising the polynucleotide sequence, a host cell comprising the vector, use of the polynucleotide, vector or host cell in therapy and in an assay, and a method of identifying UCOEs. The

UCOE opens chromatin or maintains chromatin in an open state and facilitates reproducible expression of an operably-linked gene in cells of

at least two different tissue types.

OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 16:40:13 ON 30 DEC 2009)

FILE 'BIOSIS, CAPLUS, EMBASE' ENTERED AT 16:50:44 ON 30 DEC 2009

L1 29954 S ANTI APOPTO?  
L2 20334 S APOPTOSIS (3A) INHIBITOR  
L3 74553 S APOPTOSIS (3A) INHIBIT?  
L4 16445 S APOPTO? (3A) PROTECT?  
L5 97885 S L1 OR L2 OR L3  
L6 1249 S L5 AND TRANSACTIVAT?  
L7 7 S L6 AND CHO  
L8 5 DUP REM L7 (2 DUPLICATES REMOVED)  
L9 36 S UCOE  
L10 12 S UBIQUITOUS CHROMATIN OPENING ELEMENT  
L11 37 S L9 OR L10  
L12 2 S L11 AND HNRNP A2

=> s l6 and antibody

L13 60 L6 AND ANTIBODY

=> dup rem l13

PROCESSING COMPLETED FOR L13

L14 40 DUP REM L13 (20 DUPLICATES REMOVED)

=> d bib abs 1-

YOU HAVE REQUESTED DATA FROM 40 ANSWERS - CONTINUE? Y/(N):y

L14 ANSWER 1 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

DUPLICATE 1

AN 2009:418008 BIOSIS

DN PREV200900419111

TI delta-Opioid receptor-stimulated Akt signaling in neuroblastoma x glioma

(NG108-15) hybrid cells involves receptor tyrosine kinase-mediated PI3K

activation.

AU Heiss, Anika; Ammer, Hermann; Eisinger, Daniela A. [Reprint Author]

CS Univ Munich, Inst Pharmacol Toxicol and Pharm, Koeniginstr 16, D-80539

Muenchen Federal, Germany

eisinger@pharmtox.vetmed.uni-muenchen.de

SO Experimental Cell Research, (JUL 15 2009) Vol. 315, No. 12, pp. 2115-2125.

CODEN: ECREAL. ISSN: 0014-4827.

DT Article

LA English

ED Entered STN: 15 Jul 2009

Last Updated on STN: 15 Jul 2009

AB delta-Opioid receptor (DOR) agonists possess cytoprotective properties, an

effect associated with activation of the "pro-survival" kinase Akt. Here

we delineate the signal transduction pathway by which opioids induce Akt

activation in neuroblastoma x glioma (NG108-15) hybrid cells.

Exposure of

the cells to both [D-Pen(2,5)]enkephalin and etorphine resulted in a time-

and dose-dependent increase in Akt activity, as measured by means of an

activation-specific antibody recognizing phosphoserine-473.

DOR-mediated Akt signaling is blocked by the opioid antagonist naloxone

and involves inhibitory G(i/o) proteins, because pre-treatment with

pertussis toxin, but not overexpression of the G(q/11) scavengers EBP50

and GRK2-K220R, prevented this effect. Further studies with Wortmannin

and LY294002 revealed that phosphoinositol-3-kinase (PI3K) plays a central

role in opioid-induced Akt activation. Opioids stimulate Akt activity

through transactivation of receptor tyrosine kinases (RTK),

because pre-treatment of the cells with inhibitors for neurotrophin

receptor tyrosine kinases (AG879) and the insulin-like growth factor

receptor IGF-1 (AG1024), but not over-expression of the G beta gamma

scavenger phosducin, abolished this effect. Activated Akt translocates to

the nuclear membrane, where it promotes GSK3 phosphorylation and prevents

caspase-3 cleavage, two key events mediating inhibition of cell apoptosis and enhancement of cell survival. Taken together,

these

results demonstrate that in NG108-15 hybrid cells DOR agonists possess

cytoprotective properties mediated by activation of the RTK/PI3K/Akt



signaling pathway. (C) 2009 Elsevier Inc. All rights reserved.

L14 ANSWER 2 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights

reserved on STN

AN 2009511775 EMBASE

TI Recent advances in the use of cell-penetrating peptides for medical and biological applications.

AU Fonseca, Sonali B.; Pereira, Mark P.; Kelley, Shana O. (correspondence)

CS Department of Pharmaceutical Sciences, Leslie Dan Faculty of Pharmacy, University of Toronto, Ont., Canada. shana.kelley@utoronto.ca

AU Kelley, Shana O. (correspondence)

CS Department of Biochemistry, Faculty of Medicine, University of Toronto, Ont., Canada. shana.kelley@utoronto.ca

SO Advanced Drug Delivery Reviews, (30 Sep 2009) Vol. 61, No. 11, pp.

953-964.

Refs: 122

ISSN: 0169-409X CODEN: ADDREP

PB Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands.

PUI S 0169-409X(09)00199-9

CY Netherlands

DT Journal; General Review; (Review)

FS 026 Immunology, Serology and Transplantation

027 Biophysics, Bioengineering and Medical Instrumentation

029 Clinical and Experimental Biochemistry

037 Drug Literature Index

039 Pharmacy

052 Toxicology

LA English

SL English

ED Entered STN: 6 Nov 2009

Last Updated on STN: 6 Nov 2009

AB The selective permeability of the plasma membrane prohibits most exogenous

agents from gaining cellular access. Since many therapeutics and reporter

molecules must be internalized for activity, crossing the plasma membrane

is essential. A very effective class of transporters harnessed for this

purpose are cell penetrating peptides (CPPs), a group of short cationic

sequences with a remarkable capacity for membrane translocation.

Since

their discovery in 1988, CPPs have been employed for the delivery of a

wide variety of cargo including small molecules, nucleic acids, antibodies

and nanoparticles. This review describes recent advances in the use of

CPPs for biological and therapeutic applications. In particular, an

emphasis is placed on novel systems and insights acquired since 2006.

Basic research on CPPs has recently yielded techniques that provide

further information on the controversial mechanism of CPP uptake and has

also resulted in the development of new model membrane systems to evaluate

these mechanisms. In addition, recent use of CPPs for the development of

new cellular imaging tools, biosensors, or biomolecular delivery systems

have been highlighted. Lastly, novel peptide delivery vectors, designed

to tackle some of the drawbacks of CPPs and enhance their versatility,

will be described. This review will illustrate the diverse applications

for which CPPs have been harnessed and also demonstrate the remarkable

advancements these peptides have facilitated in cell biology.

.COPYRGHT.

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L14 ANSWER 3 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

DUPLICATE 2

AN 2008:225618 BIOSIS

DN PREV200800224841

TI A novel role of sprouty 2 in regulating cellular apoptosis.

AU Edwin, Francis; Patel, Tarun B. [Reprint Author]

CS Loyola Univ, Stritch Sch Med, Dept Pharmacol, 2160 S 1st Ave, Maywood, IL

60153 USA

tpatel7@lumc.edu

SO Journal of Biological Chemistry, (FEB 8 2008) Vol. 283, No. 6, pp.

3181-3190.

CODEN: JBCHA3. ISSN: 0021-9258.

DT Article

LA English

ED Entered STN: 26 Mar 2008

Last Updated on STN: 26 Mar 2008

AB Sprouty (SPRY) proteins modulate receptor-tyrosine kinase signaling and,

thereby, regulate cell migration and proliferation. Here, we have

examined the role of endogenous human SPRY2 (hSPRY2) in the regulation of

cellular apoptosis. Small inhibitory RNA-mediated silencing of hSPRY2 abolished the anti-apoptotic action of serum in adrenal cortex adenocarcinoma (SW13) cells. Silencing of hSPRY2 decreased serum- or epidermal growth factor (EGF)-elicited activation of AKT and ERK1/2 and reduced the levels of EGF receptor. Silencing of hSPRY2 also inhibited serum- induced activation of p90RSK and decreased phosphorylation of pro-apoptotic protein BAD (BCL2-antagonist of cell death) by p90RSK. Inhibiting both the ERK1/2 and AKT pathways abolished the ability of serum to protect against apoptosis, mimicking the effects of silencing hSPRY2. Serum transactivated the EGF receptor (EGFR), and inhibition of the EGFR by a neutralizing antibody attenuated the anti-apoptotic actions of serum. Consistent with the role of EGFR and perhaps other growth factor receptors in the antiapoptotic actions of serum, the tyrosine kinase binding domain of c-Cbl (Cbl-TKB) protected against down-regulation of the growth factor receptors such as EGFR and preserved the antiapoptotic actions of serum when hSpry2 was silenced. Additionally, silencing of Spry2 in c-Cbl null cells did not alter the ability of serum to promote cell survival. Moreover, reintroduction of wild type hSPRY2, but not its mutants that do not bind c-Cbl or CIN85 into SW13 cells after endogenous hSPRY2 had been silenced, restored the anti-apoptotic actions of serum. Overall, we conclude that endogenous hSPRY2-mediated regulation of apoptosis requires c-Cbl and is manifested by the ability of hSPRY2 to sequester c-Cbl and thereby augment signaling via growth factor receptors.

L14 ANSWER 4 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN

AN 2008481233 EMBASE

TI Leptin stimulates the proliferation of human oesophageal adenocarcinoma

cells via HB-EGF- and TGF $\alpha$ -mediated transactivation of the epidermal growth factor receptor.

AU Ogunwobi, O.O.; Beales, Ian L.P.

CS Biomedical Research Centre, School of Medicine, Health Policy and Practice, University of East Anglia, Norwich NR4 7TJ, United Kingdom.

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AU Beales, Ian L.P.

CS Gastroenterology Department, Norfolk and Norwich University Hospital,

Norwich NR4 7UZ, United Kingdom. i.beales@uea.ac.uk

AU Beales, I., Dr. (correspondence)

CS School of Medicine, Health Policy and Practice, University of East Anglia,

Norwich NR4 7TJ, United Kingdom. i.beales@uea.ac.uk

SO British Journal of Biomedical Science, (2008) Vol. 65, No. 3, pp. 121-127.

Refs: 30

ISSN: 0967-4845 CODEN: BJMSEO

PB Step Publishing Ltd, Tunbridge Wells, Kent, TN2 3DR, United Kingdom.

CY United Kingdom

DT Journal; Article

FS 003 Endocrinology

005 General Pathology and Pathological Anatomy

011 Otorhinolaryngology

016 Cancer

029 Clinical and Experimental Biochemistry

048 Gastroenterology

LA English

SL English

ED Entered STN: 23 Oct 2008

Last Updated on STN: 23 Oct 2008

AB Obesity increases the risk of developing oesophageal adenocarcinoma (OAC)

as well as several other cancers. Leptin is secreted by adipocytes and

serum leptin levels rise with body mass index. Leptin stimulates proliferation and inhibits apoptosis in OAC cells but

the mechanisms are not fully elucidated, Transactivation of the epidermal growth factor receptor (EGFR) is an important

signalling

mechanism for G-protein-coupled receptors, but the relationship

with

leptin-type receptors has not been examined and the authors

hypothesise

that leptin-induced proliferation involves EGFR signalling.

This study

examines the effect of leptin of EGFR signalling in cultured

cell lines.

Leptin stimulated proliferation in four OAC lines expressing

leptin

receptors (OE33, OE19, BIC-1 and FLO) and this was abolished by specific

EGFR inhibitors (PD153035 and AG1478). Leptin-induced proliferation was

inhibited by neutralising antibodies to transforming growth factor- $\alpha$  (TGF $\alpha$  and HB-EGF) but not by anti-amphiregulin. Leptin significantly increased gene expression of HB-EGF and TGF $\alpha$  as measured by a quantitative real-time polymerase chain reaction (PCR) method but did not alter amphiregulin and EGFR gene expression. Leptin increased extracellular release of HB-EGF and TGF $\alpha$  and this was blocked by matrix metalloproteinase (MMP) inhibitors. The MMP inhibitors also abolished leptin-induced proliferation as well as leptin-induced EGFR tyrosine phosphorylation, but did not affect proliferation or EGFR activation induced by TGF $\alpha$ . The authors conclude that leptin stimulates OAC proliferation via increased gene expression of HB-EGF and TGF $\alpha$ , MMP-mediated extracellular release of HB-EGF and TGF $\alpha$  and subsequent activation of EGFR.

L14 ANSWER 5 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2009:1447245 CAPLUS

TI Involvement of Ang II in ischemia-induced angiogenesis

AU de Gasparo, M.; Levy, B. I.

CS MG Consulting Co, Rossemaison, 2842, Switz.

SO Conference of the European Society for Microcirculation, Proceedings, 25th, Budapest, Hungary, Aug. 26-29, 2008 (2008), 31-35.

Editor(s):

Koller, Akos. Publisher: Monduzzi Editore, Bologna, Italy.

CODEN: 69MCMD; ISBN: 978-88-7587-461-2

DT Conference

LA English

AB Most of available data evidence that the Ang II-induced AT1 receptor

pathway promotes neovascularization that involves activation of VEGF/ROS/eNOS-related pathways and of the inflammatory cascade.

The role

of the AT2 receptor remains enigmatic: various studies report either an

anti-angiogenic or a pro-angiogenic effect of the AT2 receptor.

These

contrasting results could be due to the balance of the AT1/AT2 receptor in

a variety of models and to the pathophysiol. environment during the

studies. Ang II plays an important role in regulating vessel growth and

neovascularization, particularly in ischemic tissue. The resp. role of

the AT1 and AT2 receptors remains however controversial. The AT1 receptor

Ang II stimulates the hypoxia-inducible factors and various growth factors related pathways and controls the inflammatory reaction. A low oxygen environment increases the hypoxia inducible factor HIF-1 expression in blocking its proteasomic degradation and in stimulating its binding to the hypoxia responsive element of the VEGF gene promoter that activates new blood vessel formation. HIF-1 pathway may also be trigger by insulin, IGF, endothelin and Ang II. Binding of Ang II to the AT1 receptor under nonhypoxic conditions activates HIF-1 gene transcription through a DAG-sensitive PKC pathway. In addition, the Ang II-induced ROS-dependent activation of the PI3K/Akt pathways maintains a high level of HIF-1 in stabilizing HIF-1 mRNA and stimulating its translation. Furthermore, Ang II binding to the AT1 receptor stimulates HIP-1 and transactivates the VEGF receptor, which dimerizes, auto-phosphorylates and stimulates PI3K and Akt leading to eNOS activation, NO production, inhibition of apoptosis and stimulation of angiogenesis. Both AT1 receptor blockade, VEGF neutralizing antibody or VEGF antisense oligomers as well as eNOS deficiency prevent the angiogenic effect of Ang II whereas overexpression of eNOS caused a marked increase in neocapillary formation. Similarly, Ang II through its binding to the AT1 receptor can transactivate various growth factors Tyr-kinase receptors such as bFGF, EGF, PDGF. Ang II transactivates EGF receptors and stimulates angiopoietin 2 formation and MMP stimulation causing vessel growth and remodeling. Finally, Ang II bound to the AT1 receptor stimulates NADPH oxidase and superoxide formation initiating neovascularization. This ROS-dependent pathway is responsible for activation of the cytoplasmic transcription factor NFkB leading to the upregulation of various chemokine and cytokines such as VCAM, ICAM, E selectin, MCP-1 and IL-6. MCP-1 activates monocytes during collateral artery growth in vivo and enhances collateral growth and capillary sprouting after femoral artery occlusion. Inflammatory macrophages and

lymphocytes as well as expression of VEGF and MCP-1 are suppressed in ischemic tissues of AT1 receptor deleted mice. As a whole, Ang II-induced AT1 receptor pathway promotes neovascularization that involves activation of VEGF/ROS/eNOS-related pathways and of the inflammatory cascade. This effect is inhibited with AT1 receptor antagonists and in AT1 receptor deleted mice.

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2007:482933 CAPLUS

DN 146:498810

TI Cancer serum markers identified for use in hybridization- and amplification-based diagnosis of early stage human breast cancer  
IN Krause, Alexander; Leissner, Philippe; Paye, Malick; Mouglin, Bruno;

Schweighoffer, Fabien; Bracco, Laurent

PA Biomerieux S. A., Fr.; Exonhit Therapeutics S. A.

SO PCT Int. Appl., 175pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.
WO 2007048978	A2	20070503	WO 2006-FR51108
20061026			
WO 2007048978	A3	20070907	
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW		
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,		

CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG,  
BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
AZ, BY,

KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA  
FR 2892730 A1 20070504 FR 2005-11080  
20051028  
FR 2899239 A1 20071005 FR 2006-2824  
20060331  
EP 1957672 A2 20080820 EP 2006-831300  
20061026

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,  
HU, IE,  
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK,  
TR

JP 2009513125 T 20090402 JP 2008-537158  
20061026  
IN 2008CN02437 A 20090320 IN 2008-CN2437  
20080515  
CN 101365802 A 20090211 CN 2006-80046433  
20080610  
US 20090269744 A1 20091029 US 2009-91835  
20090507  
PRAI FR 2005-11080 A 20051028  
FR 2006-2824 A 20060331  
WO 2006-FR51108 W 20061026

AB The invention concerns methods and compns. that can be used for  
detecting

cancer in mammals, particularly humans. The invention  
particularly

concerns serum markers of cancers and their use in diagnostic  
procedures.

The invention also concerns tools and/or kits that can be used  
for

carrying out these methods (reagents, probes, primers,  
antibodies, chips,

cells, etc.), the preparation thereof and their use. The  
invention can be used

for detecting the presence or the progression of a cancer in  
mammals,

particularly breast cancer including during early stages. The  
invention

concerns methods and compns. that can be used for detecting  
breast cancer

in mammals, particularly humans. Microarray technol. enabled  
detection of

genes with differential expression in the early stages of human  
breast

cancer, when tumors would be most likely missed by mammog.  
These genes

represent proteins implicated in TLR stimulation, cytokine  
secretion, T



lymphocyte activation, and production of chemokines and interleukins,  
indicating the presence or increased risk of developing breast cancer.  
The identification of these breast cancer serum markers in combination  
with selective nucleic acid amplification and hybridization protocols  
enables their use for detecting the presence or the progression of breast  
cancer. The invention also concerns tools and/or kits that can be used  
for carrying out these methods (reagents, probes, primers, antibodies,  
chips, cells, etc.), the preparation thereof and their use.

L14 ANSWER 7 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2007:284115 CAPLUS

DN 146:352574

TI Double-stranded RNAs and their use for downregulating genes and treating

cardiovascular diseases

IN Chajut, Ayelet; Pinner, Elhanan

PA Quark Biotech, Inc., USA

SO PCT Int. Appl., 145pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.
WO 2007029249	A2	20070315	WO 2006-IL1036
WO 2007029249	A3	20090430	
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,			

CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG,  
BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
AZ, BY,

KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA  
EP 1933880 A2 20080625 EP 2006-796071  
20060906

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,  
HU, IE,  
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK,  
TR, AL,

BA, HR, MK, RS  
JP 2009507484 T 20090226 JP 2008-529781  
20060906

PRAI US 2005-715414P P 20050909  
US 2005-732188P P 20051031  
WO 2006-IL1036 W 20060906

AB The invention relates to a double-stranded compound, such as  
siRNAs, which

down-regulates the expression of one or more  
cardiovascular-related gene.

The invention also relates to a pharmaceutical composition  
comprising the

compound, or a vector capable of expressing the  
oligoribonucleotide compound,

and a pharmaceutically acceptable carrier. The present  
invention also

contemplates a method of treating a patient suffering from a  
cardiovascular disorder or other diseases comprising

administering to the

patient the pharmaceutical composition in a therapeutically ED  
so as to thereby  
treat the patient.

L14 ANSWER 8 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson  
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DUPLICATE 3

AN 2007:209660 BIOSIS

DN PREV200700198193

TI Hypoxia induces p53-dependent transactivation and  
Fas/CD95-dependent apoptosis.

AU Liu, T.; Laurell, C.; Selivanova, G.; Lundeberg, J.; Nilsson,  
P.; Wiman,

K. G. [Reprint Author]

CS Karolinska Inst, Canc Ctr Karolinska, Dept Oncol Pathol, SE-17176  
Stockholm, Sweden  
Klas.Wiman@ki.se

SO Cell Death and Differentiation, (MAR 2007) Vol. 14, No. 3, pp.  
411-421.

ISSN: 1350-9047.

DT Article

LA English

ED Entered STN: 21 Mar 2007

Last Updated on STN: 21 Mar 2007

AB p53 triggers apoptosis in response to cellular stress. We analyzed

p53-dependent gene and protein expression in response to hypoxia using

wild-type p53-carrying or p53 null HCT116 colon carcinoma cells.

Hypoxia

induced p53 protein levels and p53-dependent apoptosis in these cells.

cDNA microarray analysis revealed that only a limited number of genes were

regulated by p53 upon hypoxia. Most classical p53 target genes were not

upregulated. However, we found that Fas/CD95 was significantly induced in

response to hypoxia in a p53-dependent manner, along with several novel

p53 target genes including ANXA1, DDIT3/ GADD153 (CHOP), SEL1L and SMURF1.

Disruption of Fas/CD95 signalling using anti-Fas-blocking antibody

or a caspase 8 inhibitor abrogated p53-induced apoptosis

in response to hypoxia. We conclude that hypoxia triggers a p53-dependent

gene expression pattern distinct from that induced by other stress agents

and that Fas/CD95 is a critical regulator of p53-dependent apoptosis upon

hypoxia.

L14 ANSWER 9 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights

reserved on STN

AN 2008287039 EMBASE

TI HIV Tat protein increases bcl-2 expression of CD4+ T lymphocytes and

inhibits CD4+ T lymphocytes apoptosis induced by

TNF- $\alpha$  related apoptosis induced ligand (TRAIL).

AU Zheng, Lin; Yang, Yi-Da (correspondence); Sheng, Ji-Fang; Lu, Guo-Cai; Li,

Lan-Juan

CS Department of Infectious Diseases, Medical College, Zhejiang University,

Hangzhou 310003, China. yidayang@hotmail.com

SO Chinese Journal of Microbiology and Immunology, (30 Apr 2007) Vol. 27, No.

4, pp. 302-305.

Refs: 9

ISSN: 0254-5101 CODEN: ZWMZDP

PB Society of Microbiology and Immunology, Chaoyangqu, Beijing, 100024,

China.  
 CY China  
 DT Journal; Article  
 FS 004 Microbiology: Bacteriology, Mycology, Parasitology and  
 Virology  
 026 Immunology, Serology and Transplantation  
 LA Chinese  
 SL English; Chinese  
 ED Entered STN: 24 Jul 2008  
 Last Updated on STN: 24 Jul 2008  
 AB Objective: To investigate the effect of HIV Tat protein on bcl-2  
 expression in CD4+ T lymphocytes, and Tat-stimulated CD4+ T  
 lymphocytes  
 apoptosis induced by TNF- $\alpha$  related apoptosis induced ligand  
 (TRAIL).  
 Methods: Western blot was used to detect the bcl-2 expression in  
 CD4+ T  
 lymphocytes stimulated by HIV Tat protein, and 7-AAD and Annexin  
 V were  
 used to detect apoptosis of Tat-stimulated CD4+ T lymphocytes  
 induced by  
 TRAIL. Results: HIV Tat protein could increase bcl-2 expression  
 in CD4+ T  
 lymphocytes. 7-AAD staining result showed that  $53.85\% \pm 2.63\%$   
 CD4+ T  
 lymphocytes had apoptosis after being treated with 100 ng/ml  
 recombinant  
 TRAIL. If CD4+ T lymphocytes were pre-stimulated with HIV Tat,  
 only  
 $16.04\% \pm 5.26\%$  cells showed apoptosis. This effect can be  
 inhibited by  
 polyclone anti-Tat. Annexin V staining showed the same results.  
 Conclusion: HIV Tat protein increases bcl-2 expression in CD4+ T  
 lymphocytes, which inhibits apoptosis induced by  
 TRAIL. HIV Tat protein may play an important role in mechanisms  
 of HIV  
 persistent infection in CD4+ T lymphocytes.

L14 ANSWER 10 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson  
 Corporation on  
 STN

AN 2007:599245 BIOSIS

DN PREV200700602555

TI Matrix METALLOPROTEINASE-7 (MMP-7) mediates bile acid-induced  
 transactivation of EGF receptors (EGFR) and proliferative  
 signaling in human colon cancer cells.

AU Cheng, Kunrong; Xie, Guofeng; Raufman, Jean-pierre

SO Gastroenterology, (APR 2007) Vol. 132, No. 4, Suppl. 2, pp. A14.

Meeting Info.: Digestive Disease Week Meeting/108th Annual  
 Meeting of the

American-Gastroenterological-Association. Washington, DC, USA.  
 May 19 -24,

2007. Amer Gastroenterol Assoc; Amer Assoc Study Liver Dis; Amer Soc  
Gastrointestinal Endoscopy; Soc Surg Alimentary Tract.  
CODEN: GASTAB. ISSN: 0016-5085.

DT Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 6 Dec 2007  
Last Updated on STN: 6 Dec 2007

AB Fecal secondary bile acids are colon cancer promoters,  
Previously, we  
showed that conjugated secondary bile acids promote H508 colon  
cancer cell  
proliferation by transactivation of EGFR(Biochem Pharmacol  
2005,70:1035). To explore the mechanism underlying this action,  
we tested  
the hypothesis that bile acids activate a matrix  
metalloproteinase (MMP)  
that catalyzes release of an EGFR ligand. GM6001, a  
broad-spectrum MMP  
inhibitor blocked the actions of deoxycholytaurine (DCT, 50 mu  
M),  
thereby implicating MMP-catalyzed release of an EGFR ligand.  
DCT-induced  
cell proliferation was reduced by increasing concentrations of  
EGFR kinase  
inhibitors, by antibody to the ligand-binding domain of EGFR, by  
neutralizing antibody to heparin binding-EGF-like growth factor  
(HB-EGF) and by CRM197 a diphtheria toxin analogue that inhibits  
HB-EGF  
release. These findings and observations with more selective MMP  
inhibitors suggested that MMP-7, an enzyme known to release  
HB-EGF from  
pro-HB-EGF in other tissues, plays a key role in mediating bile  
acid-induced H508 colon cancer cell proliferation. Recombinant  
HB-EGF and  
MMP-7 both mimicked the signaling and proliferative actions of  
bile acids.  
Strikingly, reducing MMP-7 expression in H508 cells with either  
neutralizing antibody or increasing concentrations of siRNA  
(Fig. 1) attenuated DCT-induced cell proliferation. RT-PCR  
confirmed  
MMP-7 expression in H508 cells and confocal immunofluorescence  
microscopy  
revealed co-localization of pro-MMP-7 and proHB-EGF at the cell  
surface.  
Collectively, these findings provide strong evidence that in  
H508 human  
colon cancer cells, bile acid-induced transactivation of EGFR is  
mediated by MMP7-catalyzed release of the EGFR ligand HB-EGF.  
MMP-7 may  
provide a novel therapeutic target to prevent the proliferative  
effects of

bile acids on colon cancer.[GRAPHICS]e to strong OATPIB3 staining in a majority (67 out of 89 total specimens evaluated, 75%) of colon tumors whereas normal colon tissues (n=12) had no detectable immunostaining. Although not statistically significant, survival curves generated for high and low OATPIB3 expression in a punctate pattern demonstrated curve separation with an association between high OATPIB3 expression and improved survival. Conclusion: Our results suggest that OATPIB3 overexpression is an early event in colon tumorigenesis and its overexpression is observed in colonic tumors of all stages. OATPIB3 overexpression in colon cancer may confer a survival advantage through anti-apoptotic/pro-survival pathways. Further studies are on-going to comprehensively assess the functional and prognostic significance of OATPIB3 overexpression in colon cancers.

L14 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2006:298902 CAPLUS

DN 144:348544

TI Genes showing changes in level of expression in response to cardiac

pressure overload and their use in the prediction, prophylaxis and treatment of heart disease

IN Wagner, Roger A.; Tabibiazar, Raymond; Quertermous, Thomas

PA The Board of Trustees of the Leland Stanford Junior University, USA

SO PCT Int. Appl., 101 pp.  
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.
DATE	-----	----	-----	-----
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PI	WO 2006034356	A2	20060330	WO 2005-US33853
20050920				
	WO 2006034356	A9	20060622	
	WO 2006034356	A3	20090416	
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,			
CA, CH,				
	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,			
GB, GD,				
	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP,			
KR, KZ,				

LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW,  
 MX, MZ,  
 NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,  
 SE, SG,  
 SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
 VC, VN,  
 YU, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,  
 HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR,  
 BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG,  
 BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY,

KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA  
 CA 2580191 A1 20060330 CA 2005-2580191  
 20050920  
 US 20060094038 A1 20060504 US 2005-231700  
 20050920  
 EP 1797199 A2 20070620 EP 2005-806752  
 20050920

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,  
 HU, IE,  
 IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK,  
 TR, AL,

BA, HR, MK, YU  
 JP 2008515394 T 20080515 JP 2007-532650  
 20050920  
 PRAI US 2004-611674P P 20040920  
 WO 2005-US33853 W 20050920

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
 AB Genes showing altered levels of expression in response to  
 cardiac overload

are identified. Anal. of expression of these genes can be used  
 in the

diagnosis or assessment of susceptibility of an individual to  
 heart

failure from many etiologies, as well as the presence and  
 severity of

hypertrophy, chamber enlargement, or systolic heart failure.

Also provided

are therapeutic methods for treating a heart patient or methods  
 for

prophylactically treating an individual susceptible to heart  
 failure.

Addnl., the invention describes screening methods for  
 identifying agents

that can be administered to treat individuals that have suffered  
 a heart

attack or are at risk of heart failure.

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4  
 CITINGS)

L14 ANSWER 12 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN

AN 2006256999 EMBASE

TI Oncogenic RAS mutations in myeloma cells selectively induce cox-2 expression, which participates in enhanced adhesion to fibronectin and chemoresistance.

AU Lichtenstein, Alan (correspondence)

CS Department of Hematology-Oncology, W111H, VA West LA Hospital, 11301 Wilshire Blvd, Los Angeles, CA 90073, United States.  
alan.lichtenstein@med.va.gov

AU Hoang, Bao; Zhu, Li; Shi, Yijiang; Frost, Patrick; Yan, Huajun; Sharma, Sanjai; Sharma, Sherven; Goodglick, Lee; Dubinett, Steven

SO Blood, (1 Jun 2006) Vol. 107, No. 11, pp. 4484-4490.  
Refs: 36  
ISSN: 0006-4971; E-ISSN: 0006-4971 CODEN: BLOOAW

CY United States

DT Journal; Article

FS 016 Cancer  
022 Human Genetics  
025 Hematology  
029 Clinical and Experimental Biochemistry

LA English

SL English

ED Entered STN: 28 Jun 2006  
Last Updated on STN: 28 Jun 2006

AB Oncogenic RAS expression occurs in up to 40% of multiple myeloma (MM) cases and correlates with aggressive disease. Since activated RAS induces cyclooxygenase-2 (cox-2) expression in other tumor models, we tested a role for cox-2 in mutant RAS-containing MM cells. We used the ANBL-6 isogenic MM cell lines in which the IL-6-dependent parental line becomes cytokine independent following transfection with mutated N-RAS or K-RAS. Both mutated N-RAS- and K-RAS-expressing ANBL-6 cells demonstrated a selective up-regulation of cox-2 expression and enhanced secretion of PGE2, a product of cox-2. Furthermore, in 3 primary marrow specimens, which contained MM cells expressing mutated RAS, 15% to 40% of tumor cells were positive for cox-2 expression by immunohistochemistry. We used cox-2



inhibitors, NS398 and celecoxib, and neutralizing anti-PGE2 antibody to test whether cox-2/ PGE2 was involved in the aggressive phenotype of MM ANBL-6 cells containing mutated RAS. Although these interventions had no effect on IL-6-independent growth or adhesion to marrow stromal cells, they significantly inhibited the enhanced binding of mutant RAS-containing MM cells to fibronectin and the enhanced resistance to melphalan. These results indicate a selective induction of cox-2 in MM cells containing RAS mutations, which results in heightened binding to extracellular matrix protein and chemotherapeutic drug resistance. .COPYRGT. 2006 by The American Society of Hematology.

L14 ANSWER 13 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on

STN

DUPLICATE 4

AN 2006:406716 BIOSIS

DN PREV200600404609

TI Multiple isoforms of the tumor protein p73 are expressed in the adult

human telencephalon and choroid plexus and present in the cerebrospinal fluid.

AU Cabrera-Socorro, Alfredo; Pueyo Morlans, Mercedes; Suarez Sola, Maria

Luisa; Gonzalez Delgado, Francisco J.; Castaneyra-Perdomo, Agustin; Marin, Maria C.; Meyer, Gundela [Reprint Author]

CS Univ La Laguna, Fac Med, Dept Anat, San Cristobal la Laguna 38071, Spain  
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SO European Journal of Neuroscience, (APR 2006) Vol. 23, No. 8, pp. 2109-2118.

ISSN: 0953-816X.

DT Article

LA English

ED Entered STN: 17 Aug 2006

Last Updated on STN: 17 Aug 2006

AB p73, a homolog of the p53 tumor suppressor, codes for full-length transactivating (TA) and N-terminally truncated (Delta N) isoforms, with pro- and anti-apoptotic activities, respectively. We examined the expression of the main p73 isoforms in

adult human and mouse telencephalon and choroid plexus by immunohistochemistry on paraffin sections, and immunoblotting (IB) of

tissue extracts and cerebrospinal fluid (CSF), using antibodies against

different protein domains. Cortical neurons expressed TAp73 predominantly

in the cytoplasm and Delta Np73 mainly in the nucleus, with partial overlap in the cytoplasm. Highest expression was found in the hippocampus. IB showed an array of TAp73 variants in adult human cortex and hippocampus. IB of human choroid plexus and CSF using TAp73-specific antibodies revealed the presence of a similar to 90-kDa protein whose molecular weight was reduced after N-deglycosylation, suggesting that glycosylated TAp73 is exported into the CSF. In the mouse, high expression of TAp73 was also detected in the subcommissural organ (SCO), an ependymal gland absent in adult humans. TAp73 colocalized with anti-fibra-Reissner-antibody (AFRU), which is a marker of Reissner's fiber, the secreted SCO product. p73-deficient mice had generalized cortical hypoplasia and hydrocephalus; in addition, we observed a dramatic size reduction of the choroid plexus. However, the SCOs were apparently unaltered and continued to secrete Reissner's fiber. Our findings point to complex and widespread p73 activities in the maintenance of adult cortical neurons and in brain homeostasis. TAp73 in the CSF may play important roles in the maintenance of the adult ventricular wall as well as in the development of the proliferating neuroepithelium.

L14 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 5  
 AN 2006:1039784 CAPLUS  
 DN 146:436623

TI Inhibition of CD95-mediated apoptosis through  $\beta$ 1 integrin in the HSG epithelial cell line

AU Dang, Howard; Dehghan, Parastou Lizeth; Goodwiler, Kai; Chen, Shuo;

Zardeneta, Gustavo; Zhang, Bin-Xian; Yeh, Chih-Ko  
 CS Departments of Community Dentistry, The University of Texas Health Science

Center at San Antonio, San Antonio, TX, USA

SO Cell Communication & Adhesion (2006), 13(4), 223-232  
 CODEN: CCAEBH; ISSN: 1541-9061

PB Taylor & Francis, Inc.

DT Journal

LA English

AB The HSG cell line serves as a model for salivary gland epithelial progenitor cell differentiation. In order for a progenitor cell to

differentiate, the cell must maintain viability within its niche. Studies were designed to elucidate the mechanism for integrin-mediated HSG cell survival. HSG cells, grown on Matrigel, were resistant to CD95-mediated apoptosis. Western blot anal. showed that Matrigel induced the expression of bcl-2, bcl-xL, p63, and  $\Delta$ Np63. This induction occurred by as early as 2 h and remained for 24 h. CD95-mediated apoptosis resistance was dependent, however, upon the expression of the bcl-2 family. Furthermore, Matrigel induced bcl-2 family expression was dependent on the transactivation of the EGF receptor pathway since PD98059 and AG1478 inhibited Matrigel induced bcl-2 family expression and caused HSG cells to be sensitive to CD95-mediated apoptosis. Activation of the EGF receptor pathway, by itself, however, was not sufficient to inhibit apoptosis. Blocking antibody showed that bcl-2 family expression was mediated through  $\beta$ 1 integrin. These studies show that salivary progenitor epithelial cell survival is integrin dependent and involves the transactivation of the EGF receptor pathway.

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)  
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:1000571 CAPLUS

DN 143:399137

TI Combining lapatinib (GW572016), a small molecule inhibitor of ErbB1 and

ErbB2 tyrosine kinases, with therapeutic anti-ErbB2 antibodies enhances

apoptosis of ErbB2-overexpressing breast cancer cells

AU Xia, Wenle; Gerard, Catherine M.; Liu, Leihua; Baudson, Nathalie M.; Ory,

Thierry L.; Spector, Neil L.

CS Department of Discovery Medicine, GlaxoSmithKline, Research Triangle Park, NC, 27709-3398, USA

SO Oncogene (2005), 24(41), 6213-6221

CODEN: ONCNES; ISSN: 0950-9232

PB Nature Publishing Group

DT Journal

LA English

AB Antibodies and small mol. tyrosine kinase inhibitors targeting ErbB2

exhibit distinct, noncross resistant mechanisms of action. Here, apoptosis of ErbB2-overexpressing breast cancer cells was enhanced by combining lapatinib, an inhibitor of ErbB1 and ErbB2 tyrosine kinases, with anti-ErbB2 antibodies, including (i) trastuzumab, a humanized monoclonal antibody, and (ii) pAb, rabbit polyclonal antisera generated by vaccination with a human ErbB2 fusion protein. Treating ErbB2-overexpressing breast cancer cell lines with a relatively low concentration of lapatinib alone resulted in a minimal increase in tumor cell apoptosis with an associated decrease in steady-state protein levels of p-ErbB2, p-Akt, p-Erk1/2, and notably survivin, compared to baseline. Exposure to pAb alone reduced total ErbB2 protein, disrupting ErbB3 transactivation, leading to a marked inhibition of p-Akt; however, survivin protein levels remained unchanged and apoptosis only increased slightly. Treatment with trastuzumab alone had relatively little effect on survivin and apoptosis was unaffected. Combining lapatinib with either pAb or trastuzumab markedly downregulated survivin protein and enhanced tumor cell apoptosis. The association between the inhibition of survivin and enhanced apoptosis following the combination of ErbB2-targeted therapies provides a biol. effect in order to identify therapeutic strategies that promote tumor cell apoptosis and might improve clin. response.

OSC.G 76 THERE ARE 76 CAPLUS RECORDS THAT CITE THIS RECORD (76 CITINGS)

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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reserved on STN

AN 2005240724 EMBASE

TI Akt phosphorylates Tall oncoprotein and inhibits its represser activity.

AU Palamarchuk, Alexey; Efanov, Alexey; Maximov, Vadim; Ageilan, Rami I.;

Croce, Carlo M.; Pekarsky, Yuri (correspondence)

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du  
SO Cancer Research, (1 Jun 2005) Vol. 65, No. 11, pp. 4515-4519.  
Refs: 20  
ISSN: 0008-5472 CODEN: CNREA8  
CY United States  
DT Journal; Article  
FS 016 Cancer  
029 Clinical and Experimental Biochemistry  
LA English  
SL English  
ED Entered STN: 30 Jun 2005  
Last Updated on STN: 30 Jun 2005  
AB The helix-loop-helix transcription factor Tall is required for  
blood cell  
development and its activation is a frequent event in T-cell  
acute  
lymphoblastic leukemia. The Akt (protein kinase B) kinase is a  
key player  
in transduction of anti-apoptotic and proliferative  
signals in T cells. Because Tall has a putative Akt  
phosphorylation site  
at Thr90, we investigated whether Akt regulates Tall. Our  
results show  
that Akt specifically phosphorylates Thr90 of the Tall protein  
within its  
transactivation domain in vitro and in vivo.  
Coimmunoprecipitation experiments showed the presence of Tall in  
Akt  
immune complexes, suggesting that Tall and Akt physically  
interact. We  
further showed that phosphorylation of Tall by Akt causes  
redistribution  
of Tall within the nucleus. Using luciferase assay, we showed  
that  
phosphorylation of Tall by Akt decreased represser activity of  
Tall on  
EpB42 (P4.2) promoter. Thus, these data indicate that Akt  
interacts with  
Tall and regulates Tall by phosphorylation at Thr90 in a  
phosphatidylinositol 3-kinase-dependent manner. .COPYRGT. 2005  
American  
Association for Cancer Research.

L14 ANSWER 17 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All  
rights  
reserved on STN  
AN 2005489174 EMBASE

TI Transcription inhibition: A potential strategy for cancer therapeutics.

AU Derheimer, Frederick A.; Chang, Ching-Wei; Ljungman, Mats (correspondence)

CS Department of Radiation Oncology, Division of Radiation and Cancer

Biology, University of Michigan Comprehensive Cancer Center, Ann Arbor, MI

48109, United States. [ljungman@umich.edu](mailto:ljungman@umich.edu)

AU Derheimer, Frederick A.; Ljungman, Mats (correspondence)

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CS 4306 CCGC, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0936,

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SO European Journal of Cancer, (Nov 2005) Vol. 41, No. 16, pp. 2569-2576.

Refs: 90

ISSN: 0959-8049 CODEN: EJCAEL

PUI S 0959-8049(05)00712-4

CY United Kingdom

DT Journal; General Review; (Review)

FS 016 Cancer

022 Human Genetics

030 Clinical and Experimental Pharmacology

037 Drug Literature Index

LA English

SL English

ED Entered STN: 1 Dec 2005

Last Updated on STN: 1 Dec 2005

AB Interference with transcription triggers a stress response leading to the

induction of the tumour suppressor p53. If transcription is not restored

within a certain time frame cells may undergo apoptosis in a p53-dependent

and independent manner. The mechanisms by which blockage of transcription

induces apoptosis may involve diminished levels of anti-

apoptotic factors, inappropriate accumulation of proteins in the nucleus, accumulation of p53 at mitochondria or complications

during

replication. Many chemotherapeutic agents currently used in the clinic

interfere with transcription and this interference may contribute to their anti-cancer activities. Future efforts should be directed towards exploring whether interference of transcription could be used as an anti-cancer therapeutic strategy. .COPYRGT. 2005 Elsevier Ltd. All rights reserved.

L14 ANSWER 18 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on

STN

DUPLICATE 6

AN 2005:365178 BIOSIS

DN PREV200510155191

TI Expression of the virulence factor, BfpA, by enteropathogenic Escherichia

coli is essential for apoptosis signalling but not for NF-kappa B activation in host cells.

AU Melo, A. R.; Lasunskaia, E. B.; de Almeida, C. M. C.; Schriefer, A.;

Kipnis, T. L.; da Silva, W. Dias [Reprint Author]

CS Univ Estadual Norte Fluminense, Ctr Biociencias and Biotecnol, Lab Biol

Reconhecer, Ave Alberto Lamago 2000, BR-28013600 Campos Dos Goytacazes, RJ, Brazil  
wds@uenf.br

SO Scandinavian Journal of Immunology, (JUN 2005) Vol. 61, No. 6, pp.

511-519.

CODEN: SJIMAX. ISSN: 0300-9475.

DT Article

LA English

ED Entered STN: 14 Sep 2005

Last Updated on STN: 14 Sep 2005

AB Localized adherence (LA) of enteropathogenic Escherichia coli (EPEC) to

epithelial cells results in attaching and effacing of the surface of these

cells. LA depends on the gene bfpA, which codes for the BfpA protein. We

found that EPEC-E. coli adherence factor (EAF)((+)), expressing BfpA,

significantly reduced HeLa cell viability in comparison with EPEC-EAF((-)), as evaluated by the mitochondrial-dependent succinate

dehydrogenase conversion of 3'-[4,5,-dimethylthiazol-2yl]2,5-diphenyltetrazolium bromide (MTT) to its formazan. Apoptosis accounts for

a substantial loss of the cell viability, because the cells incubated with

EPEC-EAF((+)) or with cloned BfpA (data not shown), but not with EPEC-EAF((-)), were positive for annexin-V binding, demonstrated chromatin condensation and nuclei fragmentation and exhibited a high level of caspase-3 activity. Because the blockade of bacterial cell-surface-associated BfpA by anti-BfpA immunoglobulin (Ig)Y antibody suppressed apoptotic death induced by EPEC-EAF((+)), BfpA may be the trigger for apoptosis. Both EPEC-EAF((+)) and EPEC-EAF((-)), as well as recombinant BfpA (data not shown), activated nuclear factor (NF)-kappa B in a similar manner as analysed by the electrophoretic mobility shift assay (EMSA). EMSA supershift analysis demonstrated the presence of p65/RelA in a DNA-binding complex. In contrast to DNA binding, NF-kappa B-dependent reporter gene transactivation was stimulated more strongly by EPEC B171/EAF((+)), suggesting a role for this virulence factor in the regulation of transcriptional activity of NF-kappa B.

B. Because suppression of NF-kappa B activation by BAY11-7085, a NF-kappa B inhibitor, neither induced apoptosis by itself nor blocked apoptosis induction by EPEC-EAF((+)), it may be suggested that apoptosis is not regulated by the NF-kappa B pathway in HeLa cells.

L14 ANSWER 19 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

AN 2006:207893 BIOSIS

DN PREV200600209621

TI EGF receptor (EGFR) activation plays an anti-apoptotic role in CagA-dependent Helicobacter pylori-induced gastric epithelial cell apoptosis.

AU Yan, Fang; Krishna, Uma; Peek, Richard M. Jr; Kamel, Margo; Polk, D. Brent

SO Gastroenterology, (APR 2005) Vol. 128, No. 4, Suppl. 2, pp. A118.

Meeting Info.: Annual Meeting of the American-Gastroenterological-Association/Digestive-Disease-Week. Chicago,

IL, USA. May 14 -19, 2005. Amer Gastroenterol Assoc.

CODEN: GASTAB. ISSN: 0016-5085.

DT Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)



LA English

ED Entered STN: 29 Mar 2006

Last Updated on STN: 29 Mar 2006

AB Background. *H. pylori* infection significantly increases the risk of

gastric adenocarcinoma through disruption of the balance between epithelial cell proliferation and apoptosis in human and rodent gastric

mucosa, Increased production of cytokines, such as TNF, within *H. pylori*-infected gastric mucosa may play a pathogenic role.

Although *H.*

*pylori* has been reported to transactivate the EGFR in gastric epithelial cells, the mechanisms that regulate *H. pylori*-induced proliferation and apoptosis remain unclear. We designed these studies to

test the role of *H. pylori*-activated EGFR in determining the fate of

gastric epithelial cells. Methods. Immortalized wild-type (wt) mouse

gastric epithelial cells (MGEC) were infected with wt *H. pylori* CagA(+)

strain 7.13, or its isogenic CagA(-) or CagE(-) mutants or TNF (100 ng/ml)

for 24 h. To investigate the role of EGFR activation in cell survival,

cells were treated with the EGF (10 ng/ml) or EGFR Tyr kinase inhibitors

(AG1478 or PD153035) for 0.5 h prior to *H. pylori* or TNF treatment.

Cellular proliferation was studied using colorimetric reagent NITS.

Apoptosis was detected by TUNEL staining. Caspase activity was tested

using a Multi-caspase Activity assay. The level of EGFR Tyr phosphorylation was determined by immunoprecipitation and Western Blot

analysis using an anti-phospho-Tyr antibody. Results.

Treatment of MGEC with wt *H. pylori* significantly reduced cell numbers,

this effect increased 5-fold by inhibition of EGFR Tyr kinase activity.

Inactivation of *cagA* or *cagE*, or separation of wt *H. pylori* from MGEC by

0.2  $\mu$  M filter attenuated apoptosis and caspase activity in MGEC. *H.*

*pylori*-induced apoptosis was increased 2.5-fold by inhibiting EGFR Tyr

kinase activity. importantly, pretreatment with EGF completely blocked *H.*

*pylori*-induced apoptosis. Inhibition of EGFR activation also augmented

TNF-stimulated apoptosis in MGEC. The EGFR Tyr kinase inhibitors were

shown to inhibit wt H. pylori-stimulated EGFR Tyr phosphorylation.

Conclusion. Activation of the EGFR plays an anti-apoptotic role in both H. pylori- and TNF-induced apoptosis in MGEC. Since the disassociation between proliferation and apoptosis likely

mediates H. pylori-induced pathogenic processes, promoting cell survival

by EGFR activation may be important in regulating H. pylori-induced gastric injury, inflammation, and tumorigenesis.

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AN 2004450631 EMBASE

TI Transduction of the TAT-FLIP fusion protein results in transient resistance to Fas-induced apoptosis in vivo.

AU Krautwald, Stefan; Ziegler, Ekkehard; Tiede, Karen; Pust, Rainer; Kunzendorf, Ulrich (correspondence)

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AU Kunzendorf, Ulrich (correspondence)

CS University of Schleswig-Holstein, Campus Kiel, Dept. of Nephrology and

Hypertension, Schittenhelmstr. 12, 24105 Kiel, Germany. kunzendorf@nephro.

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SO Journal of Biological Chemistry, (15 Oct 2004) Vol. 279, No. 42, pp.

44005-44011.

Refs: 44

ISSN: 0021-9258 CODEN: JBCHA3

CY United States

DT Journal; Article

FS 030 Clinical and Experimental Pharmacology

037 Drug Literature Index

005 General Pathology and Pathological Anatomy

LA English

SL English

ED Entered STN: 12 Nov 2004

Last Updated on STN: 12 Nov 2004

AB Although tightly regulated programmed cell death (apoptosis) possesses

great importance for tissue homeostasis, several pathologic processes are

associated with organ failure due to adversely activated cell apoptosis.

Transient increase in apoptosis has been shown to cause organ damage

during fulminant hepatitis B, autoimmune diseases, ischemia-reperfusion

injury, sepsis, or allograft rejection. A defined and temporary inhibition of cell apoptosis may therefore be of high clinical relevance. Activation of death receptors results in caspase-8

recruitment to the death-inducing signaling complex, which initiates the apoptotic process through cleavage of caspase-8 and downstream substrates.

This initial step may be inhibited by the caspase-8 inhibitor FLIP (FLICE inhibitory protein). To specifically inhibit the initiation of death

receptor-mediated apoptosis we constructed a fusion protein containing

FLIP fused N-terminally to the human immunodeficiency virus TAT domain.

This TAT domain allows the fusion protein to cross the cell membrane and

thus makes the FLIP domain able to interfere with the death-inducing

signaling complex inside of the cell. We observed that incubation of

lymphocytic Jurkat or BJAB cells with TAT-FLIPs proteins significantly

inhibits Fas-induced activation of procaspase-8 and downstream caspases,

preventing cells from undergoing apoptosis. Systemic application of

TAT-FLIPs prolongs survival and reduces multi-organ failure due to

Fas-receptor-mediated lethal apoptosis in mice. Therefore, application of

cellular FLIPs in the form of a TAT fusion protein may open a promising,

easily applicable new tool for providing protection against transient,

pathologically increased apoptosis in various diseases.

L14 ANSWER 21 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on

STN

DUPLICATE 7

AN 2004:367485 BIOSIS

DN PREV200400371036

TI Intron retention generates a novel Id3 isoform that inhibits vascular

lesion formation.

AU Forrest, Scott T.; Barringhaus, Kurt G.; Perlegas, Demetra; Hammaraskjold,

Marie- Louise; McNamara, Coleen A. [Reprint Author]

CS Hlth Sci CtrDept Internal MedDiv Cardiovasc, Univ Virginia, Charlottesville, VA, 22908, USA  
cam8c@virginia.edu

SO Journal of Biological Chemistry, (July 30 2004) Vol. 279, No. 31, pp.

32897-32903. print.

CODEN: JBCHA3. ISSN: 0021-9258.

DT Article

LA English

ED Entered STN: 8 Sep 2004

Last Updated on STN: 8 Sep 2004

AB The expression of intron-containing messages has been shown to occur in a

variety of diseases including lactic acidosis, Cowden Syndrome, and

several cancers. However, it is unknown whether these intron-containing

messages result in protein production in vivo. Indeed, intron-containing

RNAs are typically retained in the nucleus, targeted for degradation, or

are repressed translationally. Here, we show that during vascular lesion

formation in rats, an alternative isoform of the helix-loop-helix transcription factor Id3 (Id3a) generated by intron retention is abundantly expressed. We demonstrate that Id3 is expressed

early in

lesion formation when the proliferative index of the neointima is highest

and that Id3 promotes smooth muscle cell (SMC) proliferation and S-phase

entry and inhibits transcription of the cell-cycle inhibitor p21Cip1.

Using an Id3a-specific antibody developed by our laboratory, we show that Id3a protein is induced during vascular lesion formation and

that Id3a expression peaks late when the proliferative index is low or

declining and extensive apoptosis is observed. Furthermore, Id3a fails to

promote SMC growth and S-phase entry or to inhibit p21Cip1 promoter

transactivation. In contrast, Id3a stimulates SMC apoptosis and inhibits endogenous Id3 production.

Adenoviral delivery of Id3a inhibited lesion formation in balloon-injured

rat carotid arteries in vivo. These data describe a novel feedback loop

whereby intron retention generates an Id3 isoform that acts to limit SMC

growth during vascular lesion formation, providing the first evidence that

regulated intron retention can modulate a pathologic process in vivo.

L14 ANSWER 22 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson  
Corporation on

STN

DUPLICATE 8

AN 2005:118894 BIOSIS

DN PREV200500117085

TI Inhibition of ErbB2 causes mitochondrial dysfunction in  
cardiomyocytes -

Implications for herceptin-induced cardiomyopathy.

AU Grazette, Luanda P.; Boecker, Wolfgang; Matsui, Takashi;  
Semigran, Marc;

Force, Thomas L.; Hajjar, Roger J.; Rosenzweig, Anthony [Reprint  
Author]

CS Massachusetts Gen Hosp, 114 16th St, Room 2600, Charlestown, MA,  
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SO Journal of the American College of Cardiology, (December 7 2004)  
Vol. 44,

No. 11, pp. 2231-2238. print.

ISSN: 0735-1097 (ISSN print).

DT Article

LA English

ED Entered STN: 23 Mar 2005

Last Updated on STN: 23 Mar 2005

AB OBJECTIVES We investigated the effects of erbB2 inhibition by  
anti-erbB2

antibody on cardiomyocyte survival and mitochondrial function.

BACKGROUND ErbB2 is an important signal integrator for the  
epidermal

growth factor family of receptor tyrosine kinases. Herceptin, an  
inhibitory antibody to the erbB2 receptor, is a potent  
chemotherapeutic but causes cardiac toxicity. METHODS Primary

cultures of

neonatal rat ventricular myocytes were exposed to anti-erbB2  
antibody (Ab) (7.5 mug/ml) for up to 24 h. Cell viability,  
mitochondrial function, and apoptosis were measured using

multiple

complementary techniques. RESULTS ErbB2 inhibition was

associated with a

dramatic increase in expression of the pro-apoptotic Bcl-2  
family protein

Bcl-xS and decreased levels of anti-apoptotic Bcl-xL.

There was a time-dependent increase in mitochondrial  
translocation and

oligomerization of bcl-associated protein (BAX), as indicated by  
1,6-bismaleimido-hexane crosslinking. The BAX oligomerization was  
associated with cytochrome c release and caspase activation.

These

alterations induced mitochondrial dysfunction, a loss of  
mitochondrial

membrane potential ( $\psi$ ) ( $76.9 \pm 2.4$  vs.  $51.7 \pm 0.1$ ;  $p < 0.05$ ;  $n = 4$ ),

a 35% decline in adenosine triphosphate levels ( $p < 0.05$ ), and a  
loss of

redox capacity (0.72 +/- 0.04 vs. 0.64 +/- 0.02; p < 0.01).  
Restoration  
of Bcl-xL levels through transactivating regulatory  
protein-mediated protein transduction prevented the decline in  
psi  
mitochondrial reductase activity and cytosolic adenosine  
triphosphate.  
CONCLUSIONS Anti-erbB2 activates the mitochondrial apoptosis  
pathway  
through a previously undescribed modulation of Bcl-xL and -xS,  
causing  
impairment of mitochondrial function and integrity and  
disruption of  
cellular energetics. Copyright 2004 by the American College of  
Cardiology  
Foundation.

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reserved on STN

AN 2004149956 EMBASE

TI Zn2+ binding to cysteine-rich domain of extracellular human  
immunodeficiency virus type 1 Tat protein is associated with Tat  
protein-induced apoptosis.

AU Misumi, Shogo; Takamune, Nobutoki; Ohtsubo, Yasuharu; Waniguchi,  
Kazuya;

Shoji, Shozo (correspondence)

CS Dept. of Pharmaceutical Biochemistry, Fac. of Med. and  
Pharmaceutical

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ac.jp

AU Shoji, Shozo (correspondence)

CS Dept. of Pharmaceutical Biochemistry, Kumamoto University, 5-1  
Oe-Honmachi, Kumamoto 862-0973, Japan. shoji@gpo.kumamoto-u.ac.jp

SO AIDS Research and Human Retroviruses, (Mar 2004) Vol. 20, No. 3,  
pp.

297-304.

Refs: 54

ISSN: 0889-2229 CODEN: ARHRE7

CY United States

DT Journal; Article

FS 004 Microbiology: Bacteriology, Mycology, Parasitology and  
Virology

LA English

SL English

ED Entered STN: 22 Apr 2004

Last Updated on STN: 22 Apr 2004

AB The Tat protein has several functional domains, one of which is  
the

cysteine-rich domain that is a highly conserved region in spite  
of the

presence of many subtypes of human immunodeficiency virus type 1 (HIV-1).

Although the cysteine-rich domain is a potential site for Zn<sup>2+</sup> binding, it

is controversial whether Zn<sup>2+</sup> is substantially essential for the structure

and activities of the Tat protein. To study the significance of Zn<sup>2+</sup> in

the cysteine-rich domain of the Tat protein particularly released to the

extracellular space, we raised the monoclonal antibody (MAb)

5A4, which has an attractive property of recognizing the Zn<sup>2+</sup>-binding

Tat20-41 peptide but not the apo-Tat20-41 peptide. MAb 5A4 inhibited the

trans-activation of the HIV long terminal repeat (LTR) in

HeLa-CD4-LTR/ $\beta$ -gal cells induced by treatment with the recombinant

Tat protein, indicating that MAb 5A4 can recognize the full-length Tat

protein and inhibit its trans-activity. The antibody also

inhibited the apoptosis of Jurkat cells induced by

treatment with the released native-Tat-protein-containing supernatant from

the culture of HIV-1JRFL-infected cells. These results suggest that Zn<sup>2+</sup>,

whose structure is closely associated with not only the trans-activation

of HIV-LTR but also the induction of apoptosis, binds to the extracellular

native Tat protein. The Zn<sup>2+</sup>-binding cysteine-rich domain therefore can

be a molecular target in the development of an anti-Tat vaccine and agents

for the control of extracellular-Tat-protein-mediated pathogenesis leading

to the progression of acquired immunodeficiency syndrome.

L14 ANSWER 24 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on  
STN

AN 2005:319380 BIOSIS

DN PREV200510114775

TI Transactivation of EGFR via HB-EGF shedding protects human keratinocytes from UV-irradiation-induced apoptosis.

AU Tokumaru, S. [Reprint Author]; Shirakata, Y.; Tohyama, M.; Tsuda, T.; Tan,

E.; Yahata, Y.; Yamasaki, K.; Hanakawa, Y.; Sayama, K.;

Hashimoto, K.

CS Ehime Univ, Matsuyama, Ehime 790, Japan

SO Journal of Investigative Dermatology, (MAR 2004) Vol. 122, No. 3, pp.

A138.

Meeting Info.: 65th Annual Meeting of the  
Society-for-Investigative-Dermatology. Providence, RI, USA.

April 28 -May

01, 2004. Soc Investigat Dermatol.

CODEN: JIDEAE. ISSN: 0022-202X.

DT Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 25 Aug 2005

Last Updated on STN: 25 Aug 2005

L14 ANSWER 25 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All  
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reserved on STN

AN 2003396862 EMBASE

TI A novel strategy using single-chain antibody to show the  
importance of Bcl-2 in mast cell survival.

AU Razin, Ehud

CS Department of Biochemistry, Hebrew Univ. Hadassah Medical  
School, PO Box

12272, Jerusalem 91120, Israel. ehudr@cc.huji.ac.il

AU Nissim, Ahuva (correspondence)

CS Bone and Joint Research Unit, Bart and the London, Qu. Mary's  
Sch. of

Med./Dentistry, Charterhouse Square, London EC1M 6BQ, United  
Kingdom.

a.nissim@mds.qmw.ac.uk

AU Cohen-Saidon, Cellina; Nechushtan, Hovav; Kahlon, Shira; Livni,  
Nadav

SO Blood, (1 Oct 2003) Vol. 102, No. 7, pp. 2506-2512.

Refs: 26

ISSN: 0006-4971 CODEN: BLOOAW

CY United States

DT Journal; Article

FS 016 Cancer

025 Hematology

026 Immunology, Serology and Transplantation

029 Clinical and Experimental Biochemistry

LA English

SL English

ED Entered STN: 23 Oct 2003

Last Updated on STN: 23 Oct 2003

AB Apoptosis or programmed cell death plays an important role in a  
wide

variety of physiologic processes and is regulated by proteins of  
the Bcl-2

family consisting of both antiapoptotic and proapoptotic  
factors. The

direct involvement of the Bcl-2 protein family in the process of  
mast cell

apoptosis has not been clarified. In the present work we have  
used a



single-chain antibody (scFv) raised against Bcl-2 derived from a semisynthetic human phage-display antibody library. The addition of TAT sequence, which is responsible for translocation through the membrane, endows the anti-Bcl-2-scFv with the ability to penetrate living cells. Moreover, it specifically neutralizes Bcl-2 intracellularly by binding to the BH1 domain and eradicates its anti-apoptotic activity in 2 types of mast cells and in a human breast cancer cell line. .COPYRGT. 2003 by The American Society of Hematology.

L14 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2002:869129 CAPLUS  
 DN 137:368548  
 TI Zinc finger-containing transcription factor KRC protein for modulating immune responses and screening immunomodulators  
 IN Glimcher, Laurie H.; Oukka, Mohamed  
 PA President & Fellows of Harvard College, USA  
 SO PCT Int. Appl., 164 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.
WO 2002090595	A1	20021114	WO 2002-US14166
20020503			
WO 2002090595	A9	20030103	
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW		
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
AU 2002308605	A1	20021118	AU 2002-308605
20020503			

US 20050026285	A1	20050203	US 2003-701401
20031103			
US 7615380	B2	20091110	
US 20070224653	A1	20070927	US 2006-578402
20061121			
PRAI US 2001-288369P	P	20010503	
WO 2002-US14166	W	20020503	
US 2003-701401	A1	20031103	
WO 2004-US36641	W	20041103	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
 AB This invention demonstrates that KRC mols. (i.e. Kappa  
 Recognition

Components) have multiple important functions as modulating  
 agents in

regulating a wide variety of cellular processes including:  
 inhibiting

NFκB transactivation, increasing TNF-α induced  
 apoptosis, inhibiting JNK activation, inhibiting  
 endogenous TNF-α expression, promoting immune cell  
 proliferation and

immune cell activation (e.g., in Th1 cells), activating IL-2  
 expression

e.g., by activating the AP-1 transcription factor, activating  
 the Ras and

Rac oncogenes, regulating PKC theta activity and increasing  
 actin polymerization

The present invention also demonstrates that KRC interacts with  
 TRAF.

Methods for identifying modulators of KRC activity are provided.

Methods

for modulating an immune response using agents that modulate KRC  
 activity

are also provided.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2002:123061 CAPLUS

DN 136:179006

TI Human tumor suppressor ASP (apoptosis stimulating protein),  
 their natural

inhibitor I-ASP and function in transactivation of p53

IN Lu, Xin

PA Ludwig Institute for Cancer Research, Switz.

SO PCT Int. Appl., 130 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.
DATE			

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PI	WO 2002012325	A2	20020214	WO 2001-GB3524
20010806				
	WO 2002012325	A3	20030306	
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,			
CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE,			
GH, GM,				
	HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,			
LR, LS,				
	LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL,			
PT, RO,				
	RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,			
US, UZ,				
	VN, YU, ZA, ZW			
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,			
CH, CY,				
	DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,			
TR, BF,				
	BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,			
TG				
	CA 2417368	A1	20020214	CA 2001-2417368
20010806				
	AU 2001076515	A	20020218	AU 2001-76515
20010806				
	EP 1313762	A2	20030528	EP 2001-954168
20010806				
	EP 1313762	B1	20060705	
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,			
MC, PT,				
	IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	CN 1446228	A	20031001	CN 2001-813859
20010806				
	CN 1310942	C	20070418	
	JP 2004525605	T	20040826	JP 2002-518296
20010806				
	AT 332309	T	20060715	AT 2001-954168
20010806				
	EP 1710582	A2	20061011	EP 2006-76277
20010806				
	EP 1710582	A3	20061102	
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,			
MC, PT,				
	IE, FI, CY, TR			
	AU 2001276515	B2	20061012	AU 2001-276515
20010806				
	PT 1313762	E	20061130	PT 2001-954168
20010806				
	ES 2269430	T3	20070401	ES 2001-954168
20010806				
	CN 101187663	A	20080528	CN 2007-10079529
20010806				
	US 20040053262	A1	20040318	US 2003-343649
20030904				

HK 1057377	A1	20061229	HK 2003-108730
20031128			
US 20040228866	A1	20041118	US 2004-819095
20040405			
PRAI GB 2000-19018	A	20000804	
GB 2000-29996	A	20001208	
GB 2001-12890	A	20010526	
CN 2001-813859	A3	20010806	
EP 2001-954168	A3	20010806	
WO 2001-GB3524	W	20010806	
US 2003-343649	A2	20030904	

# ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention relates to the identification of a new member of a family of tumor suppressor genes (apoptosis stimulating proteins, ASP's) which encode polypeptides capable of modulating the activity of p53 and polypeptides, I-ASP, capable of modulating the activity of said tumor suppressor polypeptide. The invention related to tissue distribution of ASP proteins: both ASP-1 and ASP-2 mRNA are expressed in all the human tissues tested with the highest expression levels of ASP-1 and ASP-2 in heart, skeletal muscle and kidney. The invention demonstrates that ASP-1 and ASP-2 specifically stimulate the transactivation function of p53 on the promoters of Bax and PIG-3 and enhances the apoptotic function of all the members of p53 family, including p73 and p63. The invention also demonstrates that the pro-apoptotic function of ASP-1 and ASP-2 may be regulated by the natural inhibitor I-ASP. The invention also demonstrates that the expression levels of ASP-1 and ASP-2 are frequently down regulated in human breast carcinomas and overexpression of I-ASP is detected in 8 of the tumor tissues compared to their normal paired controls. The invention further demonstrates that ability of I-ASP to inhibit p53-induced apoptosis may make cells more resistant to cytotoxic effect of chemotherapy drugs.

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

reserved on STN

AN 2002308222 EMBASE

TI HIV-1-Tat protein activates phosphatidylinositol  
3-kinase/AKT-dependent  
survival pathways in Kaposi's sarcoma cells.

AU Deregibus, Maria Chiara; Cantaluppi, Vincenzo; Doublier, Sophie;  
Brizzi,  
Maria Felice; Deambrosis, Ilaria; Albini, Adriana; Camussi,  
Giovanni  
(correspondence)

CS Cattedra di Nefrologia, Dipartimento di Medicina Interna, Osp.  
Maggiore S.  
Giovanni Battista, Corso Dogliotti 14, Torino 10126, Italy.  
giovanni.camussi@unito.it

SO Journal of Biological Chemistry, (12 Jul 2002) Vol. 277, No. 28,  
pp.  
25195-25202.  
Refs: 53  
ISSN: 0021-9258 CODEN: JBCHA3

CY United States

DT Journal; Article

FS 037 Drug Literature Index  
004 Microbiology: Bacteriology, Mycology, Parasitology and  
Virology

LA English

SL English

ED Entered STN: 3 Oct 2002  
Last Updated on STN: 3 Oct 2002

AB In this study we found that Tat protected vincristine-treated  
Kaposi's  
sarcoma cells from apoptosis and from down-regulation of several  
anti-apoptotic genes such as AKT-1, AKT-2, BCL2, BCL-XL,  
and insulin-like growth factor I and induced the de novo  
expression of the  
interleukin-3 gene. Moreover, we found that Tat enhanced  
phosphorylation  
of AKT and BAD proteins. The inhibition of phosphatidylinositol  
3-kinase  
with two unrelated pharmacological inhibitors, wortmannin and  
LY294002,  
abrogated both the anti-apoptotic effect and the  
phosphorylation of AKT induced by Tat. After treatment with  
Tat, the AKT  
enzymatic activity showed a biphasic increase: an early  
activation (15  
min), independent from protein synthesis; and a delayed  
activation (24 h),  
which was significantly decreased upon blockage of protein  
synthesis.  
Experiments with a function blocking antivascular endothelial  
cell growth

factor receptor-2 antibody suggested that both the early and delayed AKT activation and the protection from apoptosis were triggered by the interaction of Tat with vascular endothelial cell growth factor receptor-2. Moreover, experiments with function-blocking antibodies directed against insulin-like growth factor I/insulin-like growth factor I receptor or interleukin-3 indicated their involvement in the delayed activation of AKT and their contribution to the anti-apoptotic effect of Tat on vincristine-treated Kaposi's sarcoma cells.

L14 ANSWER 29 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights

reserved on STN

AN 2002305324 EMBASE

TI Hepatitis c virus core protein inhibits apoptosis via enhanced Bcl-xL expression.

AU Otsuka, Motoyuki; Kato, Naoya (correspondence); Taniguchi, Hiroyoshi;

Yoshida, Hideo; Goto, Tadashi; Shiratori, Yasushi; Omata, Masao

CS Department of Gastroenterology, Graduate School of Medicine, University of

Tokyo, Tokyo, Japan. kato-2im@h.u-tokyo.ac.jp

AU Kato, Naoya (correspondence)

CS Department of Gastroenterology, Faculty of Medicine, University of Tokyo,

7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8655, Japan.

kato-2im@h.u-tokyo.ac.jp

SO Virology, (2002) Vol. 296, No. 1, pp. 84-93.

Refs: 56

ISSN: 0042-6822 CODEN: VIRLAX

CY United States

DT Journal; Article

FS 004 Microbiology: Bacteriology, Mycology, Parasitology and Virology

LA English

SL English

ED Entered STN: 13 Sep 2002

Last Updated on STN: 13 Sep 2002

AB Previous studies indicated that hepatitis C virus core protein influences

cellular apoptosis. However, the precise mechanisms of the effects are

not fully understood. Therefore, in this study, we examined the mechanisms of the effects on cell apoptosis by core protein, using

transiently transfected and magnetically collected core-producing HepG2

cells. First, to elucidate the target site of core protein in the apoptotic pathway, we examined the activation of caspases after anti-Fas antibody stimulation. Core protein inhibited the apoptotic cascade downstream from caspase 8 and upstream from caspase 3. Next, to clarify more direct mechanisms of this effect, mRNA levels of several bcl-2-related genes were examined. An RNase protection assay showed that the mRNA of bcl-xl increased in the core-producing cells. We showed that this increase was mediated by the enhancement of bcl-x promoter activity by core protein through an extracellular-regulated kinase pathway. These results suggest that core protein inhibits apoptosis at the mitochondria level through augmentation of Bcl-x expression, resulting in an inhibition of caspase 3 activation. .COPYRGT. 2002 Elsevier Science (USA).

L14 ANSWER 30 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

AN 2003:336906 BIOSIS

DN PREV200300336906

TI PPARgamma Ligand CDDO Induces Apoptosis in Leukemias Via Multiple Apoptosis Pathways.

AU Konopleva, Marina [Reprint Author]; Lapillonne, Helene [Reprint Author];

Lee, Ruey-min [Reprint Author]; Wang, Rui-yu [Reprint Author];

Tsao, Tzee

[Reprint Author]; McQueen, Teresa [Reprint Author]; Andreeff,

Michael

[Reprint Author]

CS Blood and Marrow Transplantation, The University of Texas M.D. Anderson

Cancer Center, Houston, TX, USA

SO Blood, (November 16 2002) Vol. 100, No. 11, pp. Abstract No. 2209. print.

Meeting Info.: 44th Annual Meeting of the American Society of Hematology.

Philadelphia, PA, USA. December 06-10, 2002. American Society of Hematology.

CODEN: BLOOAW. ISSN: 0006-4971.

DT Conference; (Meeting)

Conference; (Meeting Poster)

Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 23 Jul 2003

Last Updated on STN: 23 Jul 2003

AB The peroxisome proliferator-activated receptor gamma (PPARGamma) is a

member of the nuclear receptor family that activates transcription of target genes. We have previously demonstrated that the synthetic triterpenoid CDDO (2-cyano-3,12-dioxoolen-1,9-dien-28-oic acid), that

binds and transactivates PPARGamma, is a potent inducer of apoptosis in both, myeloid and lymphoid leukemic cells. We have now

investigated the mechanisms of CDDO-induced apoptosis. CDDO induced early

mitochondrial depolarization followed by activation of caspases-8, -9 and

-3. In cells with low PPARGamma levels, overexpression of anti-apoptotic Bcl-2 protected from CDDO-induced killing in HL-60/Bcl-2

cells, and inhibition of Bcl-2 via Bcl-2 antisense oligonucleotides or

Bcl-2 nonpeptidic inhibitor HA14-1 restored sensitivity to CDDO cytotoxicity. To determine the criticality of caspase-8 activation, we

utilized Jurkat cells with mutated caspase-8 that are completely resistant

to Fas ligation by Fas agonistic antibody CH-11. These cells were effectively killed by PPARGamma ligand CDDO, although to a lesser

degree than Jurkat cells with functional caspase-8. In the absence of

caspase-8, CDDO induced caspase-9 and caspase-3 cleavage. Similarly, CDDO

induced apoptosis in caspase-9 knockout mouse embryonic fibroblasts. To

examine potential direct effects of CDDO on mitochondria, we evaluated

cytochrome c release by CDDO in cell-free mitochondria. Both, CDDO and

PPARGamma ligand Rosiglitazone induced cytochrome c release in a time-dependent fashion. The peripheral benzodiazepine receptor (PBR),

along with Bcl-2, is involved in the control of the mitochondrial permeability transition complex. The combination of CDDO with PBR

antagonist PK11195 (100nM), that does not induce apoptosis on its own,

caused significantly increased induction of apoptosis in HL-60 cells (CDDO

1 muM, 45%; CDDO+PK11195, 82%). cDNA array analysis (Affymetrix) demonstrated that CDDO caused downregulation of the genes involved in



mitochondrial control in HL-60 and in MCF-7 breast cancer cells, including Bcl-2, ATP synthase H<sup>+</sup> transporting mitochondrial F1 complex delta subunit and PBR-associated protein 1. Immunohistochemical analysis of apoptosis-inducing factor (AIF) which has been implicated in nuclear fragmentation as result of translocation from damaged mitochondria into the nucleus, showed CDDO-induced translocation of AIF from the cytosol to the nucleus. In summary, CDDO induces apoptosis via both, extrinsic and intrinsic apoptosis pathways and is capable of initiating caspase-independent cell death as a result of direct effects on mitochondria. These results suggest that novel PPARgamma ligands, in particular CDDO, have promise as novel therapy for leukemias and other malignancies with documented deficiencies of different apoptosis checkpoints.

L14 ANSWER 31 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights

reserved on STN

AN 2001277757 EMBASE

TI Circulating natural IgM antibodies and their corresponding human cord

blood cell-derived Mabs specifically combat the Tat protein of HIV.

AU Rodman, T.C., Dr. (correspondence); Lutton, J.D.; Jiang, S.; Al-Kouatly, H.B.; Winston, R.

CS Rockefeller University, 1230 York Avenue, New York, NY 10021, United

States. rodmant@rockefeller.edu

SO Experimental Hematology, (2001) Vol. 29, No. 8, pp. 1004-1009. Refs: 33

ISSN: 0301-472X CODEN: EXHEBH

PUI S 0301-472X(01)00678-6

CY United States

DT Journal; Article

FS 026 Immunology, Serology and Transplantation

004 Microbiology: Bacteriology, Mycology, Parasitology and Virology

005 General Pathology and Pathological Anatomy

LA English

SL English

ED Entered STN: 23 Aug 2001

Last Updated on STN: 23 Aug 2001

AB Objective: IgM antibodies reactive with each of two specifically defined

sequences of HIV Tat protein have been identified in sera from both HIV+ and normal (HIV-) humans. This study was designed to confirm that those antibodies are innate immune factors capable of restriction of specific mechanisms of HIV pathogenicity attributed to the Tat protein.

Materials and Methods: Antibody-secreting hybridomas were generated from human cord blood cells and processed for monoclonality. Those Mabs reactive with each of the sequences of Tat with which the circulating antibodies are reactive were isolated and their heavy and light chains identified and DNA sequenced. Pools of IgM isolated from blood of normal humans, chimpanzees, rhesus macaques, and mice and the isolated Tat reactive Mabs were tested for capacity to inhibit Tat-induced human T-cell apoptosis. Results: Human and chimpanzee IgM pools, as well as the human cord blood cell-derived Mabs, showed a definite capacity to inhibit the Tat-induced apoptosis, while the IgM pools of rhesus macaques or of mice did not. Conclusion: These studies establish that the circulating IgM of normal humans include innate antibodies capable of restriction of HIV Tat-induced pathogenesis. That capacity is shared by chimpanzee IgM but not by IgM of other primates or of mice. The identification of those human circulating antibodies as innate is confirmed by the display of similar epitopic identity and apoptosis inhibition capacity by Mabs from human cord blood cell hybridomas. Thus, the arsenal of human cord blood cell hybridomas provides a resource by which, specifically, the potential therapeutic role of the identified HIV Tat-reactive Mabs and, broadly, the fundamental role of innate antibodies in infection control may be explored. Copyright .COPYRGHT. 2001 International Society for Experimental Hematology.

DN PREV200100112741  
TI Transactivation-deficient p73alpha (p73DELTAexon2)  
inhibits apoptosis and competes with p53.  
AU Fillippovich, Igor; Sorokina, Natasha; Gatei, Magtoug; Haupt,  
Ygal;  
Hobson, Karen; Moallem, Eli; Spring, Kevin; Mould, Michelle;  
McGuckin,  
Michael A.; Lavin, Martin F.; Khanna, Kum Kum [Reprint author]  
CS Queensland Institute of Medical Research, Brisbane, QLD, 4029,  
Australia  
SO Oncogene, (25 January, 2001) Vol. 20, No. 4, pp. 514-522. print.  
CODEN: ONCNES. ISSN: 0950-9232.  
DT Article  
LA English  
ED Entered STN: 28 Feb 2001  
Last Updated on STN: 15 Feb 2002  
AB p73 has recently been identified as a structural and functional  
homolog of  
the tumor suppressor protein p53. Overexpression of p53  
activates  
transcription of p53 effector genes, causes growth inhibition  
and induced apoptosis. We describe here the effects of a  
tumor-derived truncated transcript of p73alpha (p73DELTAexon2)  
on p53  
function and on cell death. This transcript, which lacks the  
acidic  
N-terminus corresponding to the transactivation domain of p53,  
was initially detected in a neuroblastoma cell line.  
Overexpression of  
p73DELTAexon2 partially protects lymphoblastoid cells against  
apoptosis  
induced by anti-Fas antibody or cisplatin. By cotransfecting  
p73DELTAexon2 with wild-type p53 in the p53 null line Saos 2, we  
found  
that this truncated transcript reduces the ability of wild-type  
p53 to  
promote apoptosis. This anti-apoptotic effect was  
also observed when p73DELTAexon2 was co-transfected with  
full-length p73  
(p73alpha). This was further substantiated by suppression of p53  
transactivation of the effector gene p21/Waf1 in p73DELTAexon2  
transfected cells and by inhibition of expression of a reporter  
gene under  
the control of the p53 promoter. Thus, this truncated form of  
p73 can act  
as a dominant-negative agent towards transactivation by p53 and  
p73alpha, highlighting the potential implications of these  
findings for  
p53 signaling pathway. Furthermore, we demonstrate the  
existence of a  
p73DELTAexon2 transcript in a very significant proportion (46%)  
of breast

cancer cell lines. However, a large spectrum of normal and malignant tissues need to be surveyed to determine whether this transdominant p73 variant occurs in a tumor-specific manner.

L14 ANSWER 33 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights

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AN 2001006308 EMBASE

TI Smad7 is induced by CD40 and protects WEHI 231 B-lymphocytes from transforming growth factor- $\beta$ -induced growth inhibition and apoptosis.

AU Patil, S.; Wildey, G.M.; Brown, T.L.; Choy, L.; Derynck, R.; Howe, P.H.

(correspondence)

CS Dept. of Cell Biology, Lerner Research Institute, Cleveland Clinic

Foundation, Cleveland, OH 44195, United States. howep@ccf.org

SO Journal of Biological Chemistry, (8 Dec 2000) Vol. 275, No. 49, pp.

38363-38370.

Refs: 59

ISSN: 0021-9258 CODEN: JBCHA3

CY United States

DT Journal; Article

FS 029 Clinical and Experimental Biochemistry

LA English

SL English

ED Entered STN: 11 Jan 2001

Last Updated on STN: 11 Jan 2001

AB Transforming growth factor- $\beta$  (TGF- $\beta$ ) is a potent inducer of apoptosis in B-lymphocytes and is essential for immune regulation and

maintenance of self-tolerance. Here we show that concomitant signaling

through CD40 sustains proliferation and rescues the premature B cell line

WEHI 231 from both TGF- $\beta$ -induced and anti-IgM-induced apoptosis. The

anti-apoptotic effect of CD40 is associated with the transcriptional activation of the inhibitory Smad7 protein. The transactivation of Smad7 by CD40 is NF $\kappa$ B-dependent in that pharmacological inhibitors of this pathway,

N-tosyl-L-phenylalanine

chloromethyl ketone and pyrrolidine dithiocarbamate, abrogate CD40-induced

Smad7 expression. Ectopic overexpression of Smad7 inhibited Smad2

activation, TGF- $\beta$ -mediated growth inhibition, and apoptosis in WEHI 231 cells. Consistent with this result, dominant negative interference with Smad2 and Smad3 function also

inhibited TGF- $\beta$ -induced apoptosis. The inhibitory effects of Smad7 overexpression were specific to TGF- $\beta$ -induced apoptosis and were without effect on anti-IgM-induced cell death. These results suggest a mechanism of suppression of TGF- $\beta$ -induced apoptosis by CD40, mediated through activation of NF- $\kappa$ B and, consequently, induction of Smad7 expression.

L14 ANSWER 34 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on

STN

DUPLICATE 10

AN 2000:376444 BIOSIS

DN PREV200000376444

TI Direct transactivation of the anti-apoptotic gene apolipoprotein J (Clusterin) by B-MYB.

AU Cervellera, Maria; Raschella, Giuseppe; Santilli, Giorgia; Tanno, Barbara;

Ventura, Andrea; Mancini, Camillo; Sevigani, Cinzia; Calabretta, Bruno;

Sala, Arturo [Reprint author]

CS Laboratory of Molecular Pharmacology and Pathology, Consorzio Mario Negri

Sud, 66030, S. Maria Imbaro, Italy

SO Journal of Biological Chemistry, (July 14, 2000) Vol. 275, No. 28, pp.

21055-21060. print.

CODEN: JBCHA3. ISSN: 0021-9258.

DT Article

LA English

ED Entered STN: 6 Sep 2000

Last Updated on STN: 8 Jan 2002

AB B-MYB is a ubiquitously expressed transcription factor involved in the

regulation of cell survival, proliferation, and differentiation.

In an

attempt to isolate B-MYB-regulated genes that may explain the role of

B-MYB in cellular processes, representational difference analysis was

performed in neuroblastoma cell lines with different levels of B-MYB

expression. One of the genes, the mRNA levels of which were enhanced in

B-MYB expressing cells, was ApoJ/ClusterinSGP-2/TRMP-2 (ApoJ/Clusterin),

previously implicated in regulation of apoptosis and tumor progression.

Here we show that the human ApoJ/Clusterin gene contains a Myb binding

site in its 5' flanking region, which interacts with bacterially synthesized B-MYB protein and mediates B-MYB-dependent

transactivation of the ApoJ/Clusterin promoter in transient transfection assays. Endogenous ApoJ/Clusterin expression is induced in mammalian cell lines following transient transfection of a B-MYB cDNA. Blockage of secreted clusterin by a monoclonal antibody results in increased apoptosis of neuroblastoma cells exposed to the chemotherapeutic drug doxorubicin. Thus, activation of ApoJ/Clusterin by B-MYB may be an important step in the regulation of apoptosis in normal and diseased cells.

L14 ANSWER 35 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2000:529878 CAPLUS

DN 133:220764

TI Requirement for glycogen synthase kinase-3 $\beta$  in cell survival and NF- $\kappa$ B activation

AU Hoeflich, Klaus P.; Luo, Juan; Ruble, Elizabeth A.; Tsao, Ming-Sound; Jin, Ou; Woodgett, James R.

CS Ontario Cancer Institute/Princess Margaret Hospital, Toronto, ON, M5G 2M9, Can.

SO Nature (London) (2000), 406(6791), 86-90  
CODEN: NATUAS; ISSN: 0028-0836

PB Nature Publishing Group

DT Journal

LA English

AB Glycogen synthase kinase-3 (GSK-3)- $\alpha$  and - $\beta$  are dosely related protein-serine kinases, which act as inhibitory components of Wnt signalling during embryonic development and cell proliferation in adult

tissues. Insight into the physiol. function of GSK-3 has emerged from

genetic anal. in Drosophila, Dictyostelium and yeast. Here, we show that

disruption of the murine GSK-3 $\beta$  gene results in embryonic lethality

caused by severe liver degeneration during mid-gestation, a phenotype

consistent with excessive tumor necrosis factor (TNF) toxicity, as observed

in mice lacking genes involved in the activation of the transcription

factor activation NF- $\kappa$ B. GSK-3 $\beta$ -deficient embryos were rescued by inhibition of TNF using an anti-TNF- $\alpha$  antibody.

Fibroblasts from GSK-3 $\beta$ -deficient embryos were hypersensitive to TNF- $\alpha$  and showed reduced NF- $\kappa$ B function. Lithium treatment (which inhibits GSK-3) sensitized wild-type fibroblasts to TNF

and

inhibited transactivation of NF- $\kappa$ B. The early steps

leading to NF- $\kappa$ B activation (degradation of I- $\kappa$ B and translocation of NF- $\kappa$ B to the nucleus) were unaffected by the loss of GSK-3 $\beta$ , indicating that NF- $\kappa$ B is regulated by GSK-3 $\beta$  at the level of the transcriptional complex. Thus, GSK-3 $\beta$  facilitates NF- $\kappa$ B function.

OSC.G 481 THERE ARE 481 CAPLUS RECORDS THAT CITE THIS RECORD (482 CITINGS)

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 36 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1999:405078 CAPLUS

DN 131:54784

TI Human p53 regulatory protein RB18A and cDNA and compositions and methods

for treatment of diseases and infections

IN Frade, Raymond

PA Institut National de la Sante et de la Recherche Medicale (INSERM), Fr.

SO PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
-----	-----	-----	-----	-----

PI	WO 9931231	A1	19990624	WO 1998-EP8560
	19981214			

W: CA, JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

PT, SE

	CA 2315275	A1	19990624	CA 1998-2315275
	19981214			

	EP 1037992	A1	20000927	EP 1998-966428
	19981214			

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, FI

	US 6818744	B1	20041116	US 2000-581472
	20000814			

	US 20040052794	A1	20040318	US 2003-425970
	20030430			

PRAI	EP 1997-403051	A	19971215	
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	WO 1998-EP8560	W	19981214	
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	US 2000-581472	B3	20000814	
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB This invention relates to a 205-kilodalton protein called RB18A (Recognized By PAb1801 moAntibody), which is a p53 regulatory protein, to

the nucleotide sequence encoding said protein, and to the diagnostic and therapeutic applications thereof, in particular for the diagnosis, prevention or treatment of neoplasia. Although the RB18A cDNA was identified by anti-p53 antibody PAb1801, there was no significant homol. with p53 at the level of nucleotide or protein sequence. RB18A shared many functional properties with p53, i.e., DNA-binding, homo-oligomerization, binding to p53 and activation of sequence-specific DNA-binding by p53. The functional domains of RB18A were mapped. RB18A increased the in vivo half-life of p53. The RB18A gene was mapped to 17q21. RB18A transactivated the IGF-BP3 promoter in vivo. RB18A also inhibited p53-induced apoptosis.

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 37 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1998:210854 CAPLUS

DN 128:279573

OREF 128:55253a,55256a

TI Nucleic acid molecules coding for tumor suppressor proteins  
Bop1/ZAC and

their diagnostic and therapeutic uses

IN Spengler, Dietmar; Journot, Laurent

PA Max-Planck-Gesellschaft zur Forderung der Wissenschaften E.V.,  
Germany;

Centre National de la Recherche Scientifique; Spengler, Dietmar;  
Journot,

Laurent

SO PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.
DATE	-----	----	-----	-----
-----				

PI	WO 9813489	A1	19980402	WO 1997-EP5198
	19970922			

W: CA, JP, US

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,  
NL, PT, SE

	US 5876972	A	19990302	US 1996-718661
	19960923			



CA 2266427                      A1            19980402            CA 1997-2266427  
19970922  
EP 935653                      A1            19990818            EP 1997-910329  
19970922

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
MC, PT,  
                                 IE, FI

JP 2001501469                      T            20010206            JP 1998-515249  
19970922  
PRAI US 1996-718661                      A            19960923  
WO 1997-EP5198                      W            19970922

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Described are novel proteins having the biol. activity of a tumor  
suppressor protein and nucleic mols. coding for such proteins.

Methods

for the isolation of nucleic acid mols. encoding tumor  
suppressor proteins

as well as nucleic acid mols. obtainable by said method are also  
provided.

The novel expression cloning technique relies on the  
transcriptional

induction of a gene coding for a G-protein coupled receptor  
which in its

activated form stimulates the cAMP signaling pathway which in  
turn results

in the induction of cAMP responsive gene. Structural anal. of  
Bop1

demonstrated features compatible with a transcription factor  
composed of a

N-terminal seven zinc-finger DNA-binding domain and a C-terminal  
transactivation domain. The overall identity between murine

Bop1,

also called ZAC, and human ZAC coding sequences was 74.6% at the  
nucleotide level and 68.5% at the amino acid level. Bop1

displays the

ability to suppress tumor cell proliferation which could be  
demonstrated

by the constitutive and induced expression of said protein in  
transfected

tumor cells. Furthermore, Bop1 is capable of inhibiting  
anchorage-independent growth, suppress tumor formation of  
transformed

cells injected in nude mice, induces apoptosis resulting in  
inhibition of tumor cell growth, induces G1 arrest of the cell  
cycle, and acts as a nuclear transcription factor. Further,

vectors

comprising said nucleic mols. wherein the nucleic acid mols. are  
operatively linked to regulatory elements allowing expression in  
prokaryotic or eukaryotic host cells can be used for the  
production of

polypeptides encoded by said nucleic acid mols. which have tumor  
suppressor activity. Pharmaceutical and diagnostic compns. are  
provided

comprising the nucleic acid mols. of the invention and/or  
comprising a  
nucleic acid mol. which is complementary to such a nucleic acid  
mol.

Described are also compns. which comprise polypeptides encoded  
by the

described nucleic acid mols. which have tumor suppressor  
activity and/or

an antibody specifically recognizing such polypeptides.

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3  
CITINGS)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1999:382 CAPLUS

DN 130:180854

TI The hepatitis B virus HBx protein inhibits caspase 3 activity

AU Gottlob, Katrin; Fulco, Marcilla; Levrero, Massimo; Graessmann,  
Adolf

CS Institut fur Molekularbiologie und Biochemie, Freien Universitat  
Berlin

Arnimallee, Berlin, 14195, Germany

SO Journal of Biological Chemistry (1998), 273(50), 33347-33353  
CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

AB The hepatitis B virus-encoded HBx protein coactivates  
transcription of

viral and cellular genes, and it is believed to play an  
important role in

hepatitis B virus-related liver cancer. HBx has been shown to  
alter the

coordinated balance between proliferation and programmed cell  
death, being

able to either induce or block apoptosis. Here, the authors  
demonstrate

for the first time that the HBx is a potent caspase 3 inhibitor.

Rat

fibroblasts (REV2) and hepatoma cells (Hep) synthesizing the HBx  
protein

were resistant to various apoptotic stimuli such as growth factor  
depletion, tumor necrosis factor  $\alpha$ , or anti-Fas antibodies

administration. In these cells, HBx prevented DNA fragmentation  
and cell

death in the absence of de novo protein synthesis, with a similar  
efficiency as the competitive caspase 3 substrates inhibitors

VAD-FMK and

DEVD-FMK. Protein exts. obtained from the HBx pos. cells  
contained a very

low caspase activity, and addition of anti-HBx antibody restored

the endogenous caspase activity. To obtain a functional map of the anti-caspase activity of HBx, various cell lines were established that synthesized either N-terminally or C-terminally truncated HBx mols. These gene dissection expts. revealed that the regions required for the anti-caspase activity overlap with the two known transactivation domains of HBx.

OSC.G 86 THERE ARE 86 CAPLUS RECORDS THAT CITE THIS RECORD (86 CITINGS)

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1998:369896 CAPLUS

DN 129:107319

OREF 129:22013a,22016a

TI Activation of nuclear factor  $\kappa$ B: potential role in metallothionein-mediated mitogenic response

AU Abdel-Mageed, Asim B.; Agrawal, Krishna C.

CS Department of Pharmacology, Tulane Cancer Center, Tulane University School

of Medicine, New Orleans, LA, 70112, USA

SO Cancer Research (1998), 58(11), 2335-2338

CODEN: CNREA8; ISSN: 0008-5472

PB American Association for Cancer Research

DT Journal

LA English

AB The antiapoptotic response and enhanced cellular proliferation observed in

neoplastic cells on overexpression of metallothionein (MT) have been well

documented. We have investigated the mechanisms associated with this

phenomenon by using MT inducers that increased MT transcripts and stimulated growth in MCF-7 cells. A MT antisense

phosphorothioate

oligonucleotide inhibited growth induction by >50%, suggesting a potential

role of MT in mediating the mitogenic effects of these agents.

Mobility

shift assays using oligonucleotides encompassing the consensus nuclear

factor  $\kappa$ B (NF $\kappa$ B) binding site and anti-MT antibody

revealed activation and a specific interaction of NF $\kappa$ B with MT.

Cotransfection expts. using expression and reporter constructs

demonstrated that MT caused transactivation of NF $\kappa$ B. Gel

shift assays using purified proteins showed a specific

interaction between

MT and the p50 subunit of NF $\kappa$ B. These data indicate that MT may be

involved in the interaction of NFκB with the DNA-binding domain and further suggest a potential role for NFκB in mediating the antiapoptotic effects of MT.

OSC.G 81 THERE ARE 81 CAPLUS RECORDS THAT CITE THIS RECORD (82 CITINGS)

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 40 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on

STN

DUPLICATE 11

AN 1998:42956 BIOSIS

DN PREV199800042956

TI Induction of nitric oxide synthase is involved in the mechanism of

Fas-mediated apoptosis in haemopoietic cells.

AU Selleri, Carmine; Sato, Tadatsugu; Raiola, Anna Maria; Rotoli, Bruno;

Young, Neal S.; Maciejewski, Jaroslaw P. [Reprint author]

CS Dep. Internal Med., Univ. Nevada, Reno, Howard Med. Build. 320, Reno, NV

89557-0046, USA

SO British Journal of Haematology, (Dec. 1, 1997) Vol. 99, No. 3, pp.

481-489. print.

CODEN: BJHEAL. ISSN: 0007-1048.

DT Article

LA English

ED Entered STN: 27 Jan 1998

Last Updated on STN: 27 Jan 1998

AB Induction of nitric oxide synthase (iNOS) and production of the toxic

metabolite nitric oxide (NO) is one of the interferon-gamma (IFN-gamma)

and tumour necrosis factor-alpha (TNF-alpha) regulated effector mechanisms

that can lead to apoptosis of haemopoietic progenitor cells.

Fas-receptor

(Fas-R) expression can be stimulated by IFN-gamma and TNF-alpha.

Transactivation of iNOS, and possibly Fas-R promoters, by

interferon regulatory factor-1 expressed in response to

IFN-gamma may be a

part of the iNOS transduction pathway. We investigated whether the

effects of Fas-R triggering in haemopoietic cells were mediated by NO. On

Western blotting, we observed that Fas-receptor agonist, monoclonal

antibody CH11, enhanced expression of iNOS. As shown by the

reverse transcription polymerase chain reaction, CH11 also

induced iNOS

mRNA expression in purified CD34+ cells. To determine whether NO was involved in Fas-mediated apoptosis we inhibited iNOS-catalysed production of NO using anti-sense (AS) oligodeoxynucleotides (ODN) directed against iNOS mRNA. After culture of haemopoietic cells in the presence of AS-ODN, iNOS expression decreased and was no longer enhanced by Fas. This effect was associated with the prevention of Fas-mediated apoptosis, as determined by a DNA fragmentation and terminal deoxynucleotidyl transferase staining. In colony assays, specific AS-oligonucleotides prevented FAS-mediated inhibition of colony formation by total bone marrow and CD34+ progenitor cells. Our data suggest that the inhibitory effects of Fas, including induction of apoptosis, are mediated by effector mechanisms that may be similar to those described for IFN-gamma and TNF-alpha.

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---Logging off of STN---

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Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	211.09	215.05
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-13.12	
-13.12		

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